THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 JANUARY, 1953 NUMBER 1

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Table of Contents

The Importance of History and Physical Examination in the Diagnosis of Heart Disease.
Samuel A. Levine, M.D. ... 35

Treatment of the Nephrotic Syndrome.
Lloyd T. Iseri, M.D., Ivan J. Mader, M.D., and *Douglas E. Chandler, M.D.* ... 41

The Surgical Treatment of Mitral Stenosis.
Conrad R. Lam, M.D. ... 48

Current Treatment of Rheumatic Fever.
Manes S. Hecht, M.D., Anthony Nolke, M.D., and *Warren E. Shelden, M.D.* ... 51

Studies with the Flicker Photometer.
Donald C. Overy, M.D. ... 55

Metastatic Sarcoma of the Heart Diagnosed Antemortem.
Thomas N. James, M.D. ... 57

A Simplified Technique for Wiring Aneurysms.
Sidney H. Orr, M.D., and Prescott Jordan, Jr., M.D. 61

Hereditary Capillary Fragility.
Raymond W. Monto, M.D., Donald W. Bales, M.D., and *Michael J. Brennan, M.D.* ... 62

Myocardial Infarction.
Robert J. Bolt, M.D. ... 65

Re-enforcement of Vascular Grafts with Intestinal Musculature.
John M. Hammer, M.D., Patrick H. Seay, Ph.D., and *Edward J. Hill, M.D.* ... 69

Cat-Scratch Disease.
Edward L. Quinn, M.D. ... 71

President's Message:
Medicine in the Spotlight ... 73

Editorial:
A New Year—Renewed Problems ... 74
Self-established Security ... 74
Old Age Social Security Benefits ... 74
Health Surveys ... 74

Heart Beats:
Frank N. Wilson—In Memoriam
Franklin D. Johnston, M.D. ... 76

Michigan Heart Association ... 78
Summary Report on Research Projects, 1951-1952 .. 80

Earle A. Irvin, M.D., President of Industrial Medical Association ... 84

Harry Monroe Nelson, M.D., President, American Cancer Society ... 85

Supplemental Roster, Michigan State Medical Society, 1952 ... 87

Michigan's Department of Health ... 90

In Memoriam ... 91

Correspondence ... 94

News Medical ... 98

The Doctor's Library ... 108

You and Your Business ... 8

AMA News ... 16

"Medical Mailbox" ... 22

Cancer Comment ... 24

Wayne Medical Alumni Reach Half Way Mark! ... 26

Editorial Comment ... 30

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2. Heller, E. M.: The Treatment of Essential Hypertension. *Canad. Med. Assn. Jour.*, 61:293, Sept., 1949.

*Author unidentified. From Mencken, H. L.: A New Dictionary of Quotations. New York, Alfred A. Knopf, 1942, p. 1057.

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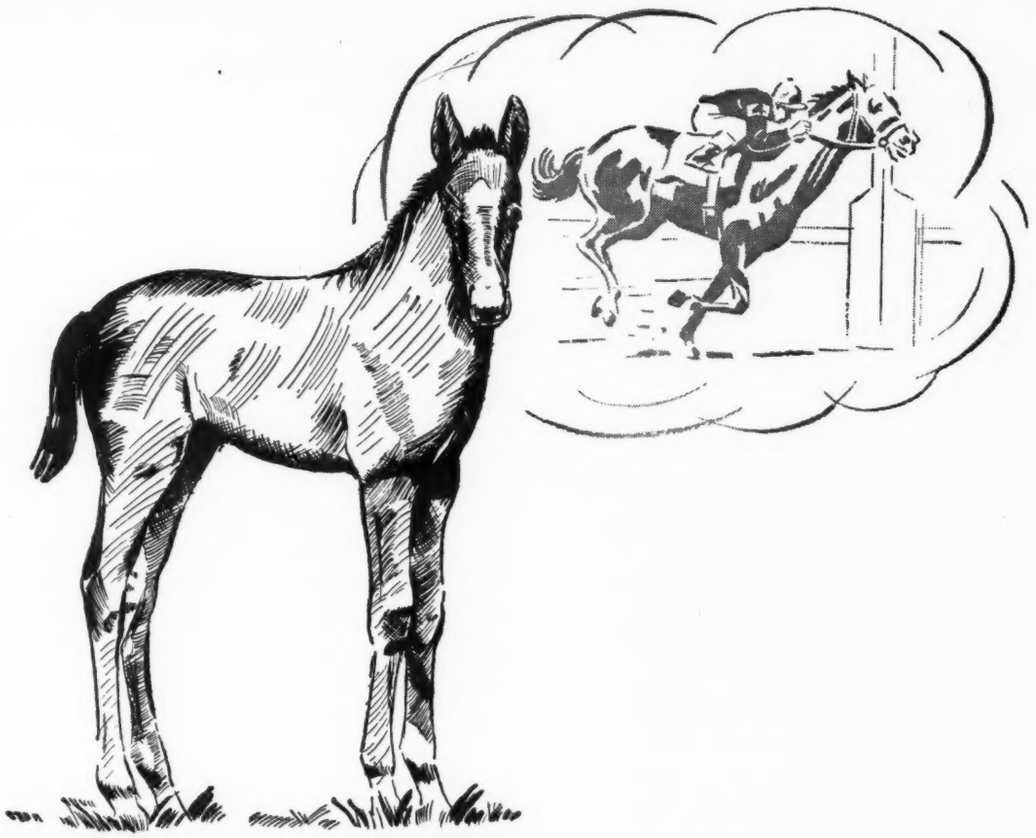

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of November 12, 1952

Seventy-nine items were presented to the Executive Committee of The Council on November 12. Chief in importance were:

- **Bay City General Hospital Problem.**—Report was made on the first attempt in Michigan, if not in the United States, of osteopaths to gain entrance into an accredited registered city hospital. A proposed amendment to the Bay City charter would have permitted osteopaths 20 per cent of the beds in the municipal institution. This bid was roundly defeated, 3 to 1, by the informed voters of Bay City on November 4.

  A review of this experience was ordered made so that it will be available upon request to any component society where a similar problem may arise.

  A vote of thanks was extended to the people of Bay City and all others who helped to maintain the high standards of the Bay City General Hospital; they were congratulated on their wise decision and their effort during the campaign preceding the November 4 vote.
- **Simplified Insurance Reporting Forms.**—Referred to The Council by the 1952 House of Delegates. Dr. Foster presented a report on contacts he made with the American Medical Association on November 7, per instruction. The subject was referred to the AMA House of Delegates to see what can be done with national health and accident insurance companies and the forms already developed by the AMA, with the suggestion that a meeting with the representatives of the Health and Accident Underwriters Conference or the Bureau of Personal Accident Health Underwriters be arranged.
- **Financial reports** were presented, studied and approved. Bills Payable were presented and payment was authorized. The sum of $20,000. of the Beaumont Memorial Funds (which will not be used until erection of Beaumont Memorial on Mackinac Island) was ordered invested in U. S. Treasury Bonds 2 per cent due 6/15/52-54, upon recommendation of the Finance Committee chairman.
- **Committee Reports.**—The following were given consideration: (a) Iodized Salt Committee, meeting of October 28; (b) Rheumatic Fever Control Committee, October 29; (c) Medical Advisory Committee to Michigan Hospital Service, November 6; (d) Committee on Scientific Work, November 11.
- **Discussion of Matters with AMA Delegates.**—The joint meeting (preceding the Clinical Session of the AMA) with AMA Delegates from Michigan (seven) included discussion on: (a) Raiding of Nurses in civilian hospitals by certain government units; (b) Utilization of medical personnel, drafted for military service, for other purposes; (c) "Involuntary" association of doctors of medicine and osteopaths; (d) Layman on programs sponsored by the AMA; (e) Clinical Session of AMA in Detroit in 1957; (f) Need for screening all policy matters by an AMA House of Delegates Reference Committee; (g) Tennessee and Minnesota State Resolutions re Veterans Administration non-service connected disability care.
- **President R. J. Hubbell, M.D., presented three matters:** (a) Report on Michigan Welfare Conference which he attended November 12 as MSMS representative; and (b) Letter of endorsement of the Michigan Tuberculosis Association's Christmas Seal Sale, which letter was authorized by the Executive Committee of The Council; (c) Appointment of Councilor A. H. Miller, M.D., Gladstone, as official MSMS representative to the funeral of Max Reynolds of Marquette, long-time member of the Michigan Crippled Children Commission. Thanks were authorized to Dr. Miller for his kindness in attending the Reynolds' funeral.
- **Editor Wilfrid Haughey recommended an arrangement** with the State Bar of Michigan whereby three doctors of medicine and three lawyers would write six articles of mutual interest to M.D.'s and lawyers, all six to be published in the April numbers of JMSMS and of the *State Bar Journal*. This suggestion was approved by the Executive Committee of The Council; The Editor's suggestion that the Roster be printed separate from JMSMS in future, to eliminate tardy publication, was approved.

- **Council Chairman William Bromme, M.D., appointed** the personnel of the Study Committee on Basic Science Law and the personnel of the Beaumont Memorial Committees, which were approved by the Executive Committee of The Council.
- **The program of the County Secretaries Conference** of February 25 in Lansing was presented and approved.
- **The Secretary reported** that testimonial banquets would be held coincident with the 1953 Michigan Clinical Institute for E. A. Irvin, M.D., Detroit, President of the national Industrial Medical Association and for H. M. Nelson, M.D., Detroit, President of the American Cancer Society. Scrolls were authorized to be presented to Drs. Irvin and Nelson.
- **Invitations to MSMS** to become a member of the Advisory Committee to Michigan State Traffic Safety Federation and also to become member of National Society for Medical Research were accepted by the Executive Committee of The Council.
- **Public Meetings throughout the State,** to be organized by the Michigan State Medical Society, on a local basis (with the assistance of the officers of the county medical society and the local MSMS Councilor), were authorized. Talks are to be presented on a scientific and socio-economic basis (combined if possible) by the MSMS President and other top officers of MSMS and of the AMA.
- **S. E. Gould, M.D.,** Eloise, was appointed as MSMS representative to attend the Conference on Trichinosis, December 15-16 in Chicago at AMA headquarters.
- **Max R. Burnell, M.D.,** Detroit, was designated as official MSMS representative to attend the 13th Annual Congress on Industrial Health, Chicago, January 20-22, 1953, following invitation of AMA Council on Industrial Health.
- **Interim Report on Study of Health and Accident Insurance Programs.**—Chairman W. S. Jones, M.D., announced his Committee would hold a meeting jointly with the MSMS Finance Committee on January 29, 1953, in Detroit; meanwhile, studies were going ahead with the insurance brokers et al.
- **Matters of mutual interest** were presented by State Health Commissioner A. E. Heustis, M.D., and discussed.
- **The Public Relations Counsel** presented the program of the Public Relations Conference scheduled for Sunday, February 1, in Detroit; a report on the recent campaign for reapportionment of the Legislature; recommendations on national legislation.
- **The scientific Press Relations Committee for the 1953 Clinical Institute** was appointed as follows: C. L. Weston, M.D., Chairman, Owosso; A. B. Gwinn, M.D., Hastings; H. F. Dibble, M.D., Detroit; and Ralph A. Johnson, M.D., Detroit.
- **The scientific Press Relations Committee for the 1953 MSMS Annual Session** in Grand Rapids also was appointed as follows: C. A. Payne, M.D., Grand Rapids, Chairman; H. G. Benjamin, M.D., F. C. Brace, M.D., and P. W. Kniskern, M.D., all of Grand Rapids.

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2. Contributions may be made direct *to the American Medical Education Foundation* and *designated* for use by specific medical schools. These gifts also will be forwarded to the national fund for Medical Education and distributed to the specified college of medicine. As in number one above, these funds must be used to supplement the instructional and research programs of the college and cannot be utilized for building or capital fund purposes.

3. Contributions may be made direct *to any participating medical school.* The purpose for which the gift shall be used *may be designated by the donor,* such as for the instructional and research programs, medical or library equipment, or construction of buildings. Such

contributions will be reported by the medical school to the American Medical Education Foundation, which will, in turn, give appropriate recognition to the donors in its annual report. For example, an alumnus of the U. of M. Medical School may make a donation towards the construction of the projected new Medical Center in Ann Arbor. The ruling of the AMA on this subject reads, in part, as follows:

"To eliminate possible competition with the fund raising campaigns of individual schools, the Directors . . . voted that, effective January 1, 1952, the Foundation each year will give appropriate recognition in its annual report to those physicians whom the medical schools report to the Foundation as having supported medical education by making a gift directly to a medical school."

4. Contributions may be made direct *to any campaign fund* which is being raised with the approval of and in behalf of any participating medical school. These gifts will be reported to the dean of the medical school, who, in turn, will report them to the American Medical Education Foundation, which, as outlined in number three above, will give appropriate recognition to the donors in its annual report.

For example, an alumnus of the College of Medicine of Wayne University or any other donor who makes a donation to the Medical Library Fund for that institution will receive full credit through the process outlined above by the American Medical Foundation.

The AMA has urged all members of the medical profession to pledge $100 per year for ten years. The amount of the pledge does not qualify in any way the recognition given any gift by the American Medical Education Foundation.

THE JOURNAL of the Michigan State Medical Society already has published a list of the Michigan donors to the American Medical Education Foundation; also, a list of all donors to the Medical Library Fund of the College of Medicine of Wayne University, giving both the names of the Wayne alumni and the non-alumni contributors to the Fund. Subsequent lists will be published from time to time in THE JOURNAL.

NON-SERVICE CONNECTED DISABILITIES

At the December Clinical Session of the American Medical Association in Denver, the most controversial resolution introduced referred to veterans' medical care and hospitalization program. A report by a six-man committee, which urged Congress to curtail hospital services to veterans with non-service connected disabilities, was made after a year's careful study. The report indicated that more than a half-million veterans, with predominantly non-service connected diseases, were admitted to Veterans Administration hospitals during 1951 alone. The Committee felt that the hospital and medical care program for veterans had grown into a costly federal giant, with unwieldy power and contradictory authority. The report was sent to the Reference Committee on Insurance and Medical Service (of which R. L. Novy, M.D., Detroit, is a member).

The Reference Committee report, which supported much of the Committee's work, urged at the same time that more study be given to this complex problem. The heart of the Reference Committee report is contained in the following two paragraphs:

"The Reference committee believes that the recommendation of the special committee—that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service-connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs—cannot be accomplished without the cooperation of Congress, veterans organizations and the medical profession.

"The reference committee, after conducting exhaustive hearings, is of the opinion that the only honorable, equitable and reasonable way to approach the problem is to recommend to the House of Delegates that the American Medical Association, the veterans organizations, the American Dental Association, the American Hospital Association, and representatives of the Department of Defense and the Veterans Administration sit down and try to reach reasonable conclusions for appropriate action from agreed upon data rather than take any precipitate action now."

AMA DELEGATES' DUTIES NEVER END!

Caucuses and committee meetings! Sessions and reports!! To bed after late business meetings on Western Time—up for early caucuses on Michigan Time!!!

That was the Denver AMA Clinical Session as experienced by Michigan's Delegates and Alternate Delegates to the AMA House of Delegates.

The schedule began with a caucus, under the chairmanship of slave-driving Wm. A. Hyland, M.D., Grand Rapids, on Monday, December 1, at 4:30 p.m., just a few minutes after most of the delegates and alternates had arrived in Denver. The list of resolutions was studied, committee coverage and appointments were laid out. The next caucus was scheduled before the first caucus was adjourned! A sergeant-at-arms was appoint-

(Continued on Page 12)

- *For Anemias with or without Neurological Disorders . . .*
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- *Megaloblastic Anemia of Infancy . . .*
- *Pernicious Anemia of Pregnancy . . .*
- *Refractory Megaloblastic Anemia . . .*

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AMA DELEGATES' DUTIES NEVER END!

(Continued from Page 10)

ed to "sound the clarion from the tower," in case any delegate or alternate had the mistaken notion or wilful desire to sleep after 7:00 a.m. W. W. Babcock, M.D., with his far-from-Eddie Guest talent, barked the following alleged rhyme over the telephone in the stillness of the dark, early morn:

"Bill Hyland says you must arise
And open up your bright blue / brown / green eyes.
Therefore awake, bathe and shave,
For you are but his willing slave.
7:30 a.m.—Independence Room.
Hurry up now—see you soon!"

That, in a basso profundo at 7:00 a.m. greeted each of the Michigan Delegates and Alternate Delegates via the telephone, including: W. A. Hyland, M.D., W. H. Huron, M.D., R. L. Novy, M.D., R. A. Johnson, M.D., J. S. DeTar, M.D., R. H. Denham, M.D., G. C. Penberthy, M.D. (representing the AMA Section on Surgery), C. I. Owen, M.D., E. D. Spalding, W. W. Babcock, M.D., E. C. Texter, M.D.

In all, five caucuses of the Michigan delegation were held during the four-day AMA meeting, three at 7:30 a.m.

Every important resolution presented to the AMA House of Delegates was thoroughly considered by the Michigan delegation. Each important reference committee was covered by a delegate or an alternate from the Wolverine State.

Michigan was honored by having two of its delegates on important reference committees: Wm. A. Hyland, M.D., was chairman of the Industrial Relations Committee; R. L. Novy, M.D., served as a member of the Reference Committee on Insurance and Medical Service.

Three resolutions were introduced by the Michigan delegation, one inviting the American Medical Association to hold its 1957 Clinical Session (in December) in Detroit.

All in all, this reporter found that the life of a delegate to the AMA (at least from Michigan) is that of a "grind." It's a tough four (in June, five) days' schedule of all work and mighty little play. It represents an annual contribution of at least two weeks' time away from one's practice, which is a rather significant contribution on the part of these Michigan men to the welfare of American Medicine and its 5,218 practitioners in Michigan.

Thank you, Delegates and Alternate Delegates to the AMA!

THE PEOPLE VOTED THREE TO ONE!

The Council of the Michigan State Medical Society recently congratulated the people of Bay City for their courageous action in voting overwhelmingly to maintain high standards of hospital care by defeating an osteopathic attempt to take over a portion of municipally owned Bay City General Hospital.

A proposed osteopathic amendment to the Bay City charter, which would have given 20 per cent of the beds in that hospital to the osteopaths, was rejected by the voters on November 4 by a vote of 14,526 to 5,633. The osteopathic-inspired amendment had caused a heated controversy in the city since it was placed on the ballot last summer.

The successful campaign against the amendment was waged by public-spirited citizens of Bay City. All available media—newspapers, radio, pamphlets and direct mail—in addition to other campaign techniques were utilized to bring the *FACTS* to the voters. With the correct background and information, the people voted against this destructive proposal, three to one!

ANNUAL COUNTY SECRETARIES CONFERENCE

Wednesday, February 25, 1953
Lobby Lounge, Porter Hotel, Lansing
Chairman: JOHN A. WHITE, M.D., Big Rapids

PROGRAM

Morning Session—10:00 A.M.

1. "The Ballot Battle to Save Bay City General Hospital" N. R. MOORE, M.D., Bay City
2. "How to Report Cases to Michigan Medical Service" R. L. NOVY, M.D., Detroit
   LOUIS H. FREYE, Detroit

Coffee Break—11:30 A.M.

3. "Exchange of Scientific Programs Between County Medical Societies" H. E. COPE, M.D., Lansing
4. "Model Constitution and By-Laws for County Medical Societies"
   J. JOSEPH HERBERT, LL.B., Manistique
5. "What About Basic Science Act?"
   E. A. OSIUS, M.D., Detroit
   "What About Medical Practice Act?"
   E. C. SWANSON, M.D., Vassar
6. "Techniques—New and Old"
   L. FERNALD FOSTER, M.D., Bay City

Afternoon Activities—1:00-3:00 P.M.

Inspection of the MSMS "home" at 606 Townsend, Lansing

Luncheon at Porter Hotel—1:30 P.M.

Luncheon Speaker
HON. WADE VAN VALKENBURG, Kalamazoo
Speaker, Michigan House of Representatives

Adjournment—3:00 P.M.

(Continued on Page 14)

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1. Perloff, W. M.: Am. J. Obst. & Gynec. *58*:684, 1949.

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SCHERING

(Continued from Page 12)

EWING'S GOVERNMENT-FINANCED TRIP

A spokesman for Federal Security Administrator Oscar R. Ewing said today his government-financed trip around the world is an official business mission planned months ago.

He denied a charge by Republican Rep. H. R. Gross of Iowa that Ewing is treating himself to a final "lush travel orgy" before leaving office next January 20. Ewing left here Tuesday night on the first leg of his two-month trip, which will keep him out of the country until a few days before Eisenhower administration takes over. He planned to travel by commercial airliner via Europe to India, where he will attend two social workers' conferences next month.

He also intends to visit social welfare installations in other parts of the Far East and to return to the United States by flying over the Pacific to San Francisco.

Three of Ewing's aides plan to join him later at the India conferences. They also will travel by commercial airliner.

The Federal Security Agency declined to estimate how much the mission will cost the taxpayers. One official said, however, that the plane fare will be "less than $2,000" for each of the four persons. In addition, government employes on official trips are entitled to draw up to $9 per day for meals, hotel rooms and incidental expenses.

Gross appealed to President Truman yesterday to cancel the Ewing trip.

In a public letter to Mr. Truman, Gross said there is "little chance" of the public benefiting from the "junket" because Ewing will be out of office almost immediately after he returns.

The White House ignored Gross' letter.

About ninety Americans will attend two international conferences on social work and welfare in India during December. Among others making the trip will be Jane Hoey, director, Bureau of Public Assistance, FSA; Wilbur Cohen, technical adviser to Social Security Commissioner Arthur Altmeyer and Melvin A. Glasser, special assistant in Children's Bureau and president, International Federation of Social Workers.

* * *

U. S. HEALTH INSURANCE TO BE STUDIED

The Health Information Foundation plans to make a $275,000 study of the nation's voluntary health insurance plans.

The foundation's president, Adm. W. H. P. Blandy (Retired), said the study seeks "to determine the coverage and effectiveness of voluntary health insurance plans and indicate areas where extension of coverage and benefit provisions are required."

Blandy's announcement said the National Opinion Research Center of the University of Chicago has been commissioned to conduct part of the study and that the foundation staff is undertaking the rest of the work.

The foundation, which describes itself as a nonprofit and nonpolitical organization, is supported by the drug, pharmaceutical, chemical and allied industries.

—*Detroit Free Press,* Dec. 8, 1952.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

Feb. 1 MSMS Public Relations Conference Sheraton-Cadillac Hotel, Detroit

Feb. 25 MSMS Annual County Secretaries' Conference Porter Hotel, Lansing

Mar. 10 MICHIGAN INDUSTRIAL HEALTH DAY Sheraton-Cadillac Hotel, Detroit

Mar. 11-13 MICHIGAN CLINICAL INSTITUTE Sheraton-Cadillac Hotel, Detroit

Mar. 13 Fourth MICHIGAN HEART DAY (part of MCI) Detroit

Spring MSMS Postgraduate Extramural Courses Statewide

April 8 Genesee County Medical Society Eighth Annual Cancer Day Flint

April Highland Park Physicians Club Clinic Highland Park

May 7 Ingham County Medical Society's Clinic Day Lansing

May 13 Wayne University Medical Alumni Clinic Day and Reunion Hotel Fort Shelby, Detroit

May 21 The American College of Surgeons Annual Symposium on Trauma and Nutrition Ann Arbor

June 1-5 AMA Annual Session New York

June 2 Annual Clinic Day, Bon Secours Hospital Detroit

June 19-20 Upper Peninsula Medical Society Annual Meeting Escanaba

July 30-31 Annual Coller-Penberthy Medical Surgical Conference Traverse City

August Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties Grayling

Sept. 22 Michigan Chapter, American College of Surgeons Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION Grand Rapids

Oct. 21 Michigan Cancer Conference East Lansing

Autumn MSMS Postgraduate Extramural Courses Statewide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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1. Light up either one first. Take a puff—get a good mouthful of smoke—and s-l-o-w-l-y let the smoke come directly through your nose.
2. Now, do exactly the same thing with the other cigarette.

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AMA News

SIXTH INTERIM SESSION

The sixth Interim Session of the American Medical Association was held in Denver, Colorado, on December 2, 3, 4, and 5, 1952. It was preceded by the PR Conference on Monday, December 1, at which several hundred were registered. There were several panel discussions. L. Fernald Foster, M.D., of Bay City, was scheduled to take part in one of these discussions, but could not attend, so Mr. Hugh Brenneman very ably substituted for him. More questions were directed to Mr. Brenneman than to any other panelist.

One of the features of the PR Conference was a skit put on by the Denver University Players, depicting two scenes, one the good and the other the bad public relations which can devolve from the daily conduct of a doctor's office. One picture showed the indifference and neglect of the various patients who came to the office—the hostess being more interested in a film star magazine and her dinner date than the convenience of the patients. The other showed the same persons in an entirely different mode of conduct of an office where the convenience and good feeling of the patient is foremost. The skit was interesting, and attracted much attention. Incidentally our Mr. Brenneman produced the same skit for us in Michigan several years ago, with Dr. S. DeTar of Milan playing the part of the doctor.

The House of Delegates met Tuesday, December 2, and received many resolutions, which were referred to appropriate committees for consideration, and report preceding adoption or rejection. William A. Hyland, M.D., of Michigan, was chairman of the Reference Committee on Industrial Health, and Robert L. Novy, M.D., also of Michigan, was on the Reference Committee on Insurance and Medical Service, probably the most active reference committee of the session.

One of the first orders of business was the announcement by the Board of Trustees that it had selected the General Practitioner of the Year for 1953, John Maston Travis, M.D., of Jacksonville, Texas. Dr. Travis is seventy-five years old and has practiced for forty-five years. He is also a charter member of the American Academy of General Practice.

The Board also reported the gift of a half million dollars to the American Medical Education Foundation. This now makes a million and a half, given by the AMA.

Besides the $1,500,000 given by the AMA to date, the foundation has received more than $585,000 from 6,600 individual donors. Receipts in the current year have totaled more than $840,000 from all sources.

Funds raised by the AMEF are transferred to the National Fund for Medical Education to be combined with contributions from corporations and others. In the last two years, a total of more than $3,100,000 has been raised by both groups.

The money is distributed as unrestricted grants to approved medical schools of the United States.

At eight P.M., Wednesday evening, December 3, a gold medal and a citation for service to humanity were conferred upon the new "General Practitioner of the Year," Dr. John Maston Travis of Jacksonville, Texas.

The special award program and the entertainment was planned by the Colorado State Medical Society for all physicians and others attending the AMA Sixth Annual Clinical Session.

Highlight of the evening was a performance by the famous Koshare Indian Dancers of La Junta, Colo. The Koshare Indian Dancers are a group of boys, primarily a scout troop, who in the past nineteen years have gained wide recognition for their interpretive Indian dances.

Music during the program was provided by Milton Shrednik's orchestra.

Thursday, December 4, was the day for reports of reference committees. Every resolution introduced was reported out by recommendation, was rewritten and reported or was consolidated with other reports when there were several on the same general topic, as happened. One of the most controversial was the question of veteran's medical care and hospitalization.

The matter was first brought to the floor of the House on the opening day, Tuesday, in the form of a report by a six-man committee, which urged Congress to curtail hospital services to veterans with non-service-connected disabilities. The report, made after a year's careful study, said that more

(Continued on Page 18)

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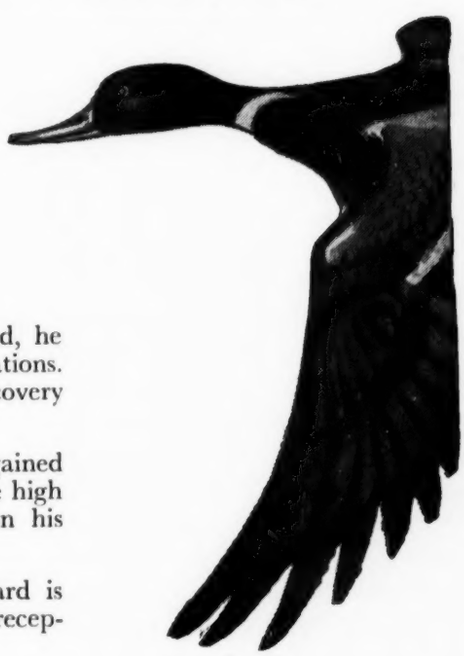

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SIXTH INTERIM SESSION

(Continued from Page 16)

than a half-million veterans, with predominantly non-service-connected diseases, were admitted to Veterans Administration hospitals during 1951 alone. The committee felt that the hospital and medical care program for veterans had grown into a costly federal giant, with unwieldly power and contradictory authority.

The report and several resolutions on the subject went to the Reference Committee on Insurance and Medical Service, made up of Drs. Carlton E. Wertz, Buffalo, chairman; Harlan A. English, Danville, Ill.; William L. Estes, Bethlehem, Pa.; H. Gordon MacLean, Oakland, Calif.; and Robert L. Novy, Detroit.

Dr. Wertz read the reference committee report. There was considerable discussion. One amendment was offered. Eventually the House adopted the reference committee report, which supported much of the committee's work, but urged at the same time that more study be given to this complex problem.

The heart of the reference committee report was contained in the following two paragraphs:

"The reference committee believes that the recommendation of the special committee . . . that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service-connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs cannot be accomplished without the co-operation of Congress, veterans organizations and the medical profession.

"The reference committee after conducting exhaustive hearings, is of the opinion that the only honorable, equitable and reasonable way to approach the problem is to recommend to the House of Delegates that the American Medical Association, the veterans organizations, the American Dental Association, the American Hospital Association, and representatives of the Department of Defense and the Veterans Administration sit down and try to reach reasonable conclusions for appropriate action from agreed upon data rather than take any precipitate action now."

Another most important and controversial subject was the Doctor Draft Law. The AMA Council on National Emergency Medical Service recommended to the House that it withhold action on the Law, which expiries on July 1. More specific data and satisfactory answers to important questions are needed before action can be taken, and the House agreed.

The Scientific Program, which extended over four days, was directed primarily to the General Practitioner and was of the usual excellent quality. Included was one Michigan essayist, R. E. L. Berry, M.D., of Ann Arbor, whose subject was "The management of Acute Surgical Dehydration."

The total Denver registration was 6,733, including 2,614 physicians, while last year's meeting in Los Angeles drew a total registration of 9,075, including 4,419 physicians.

MORE BOOKINGS SEEN FOR "YOUR DOCTOR" FILM

More and more Americans will have an opportunity to see the RKO-Pathe film, "Your Doctor," during 1953. An estimated 12 million persons viewed the fifteen-minute movie-short in more than 2,000 commercial theaters across the nation in 1952.

After January 1, 16 mm. prints of the film will be available for showings to schools, service clubs, civic groups, industrial plants and special professional meetings. Produced by Louis de Rochemont in co-operation with the AMA, this film portrays the work of 35-year-old Dr. George Bond in his valley clinic in backwoods North Carolina.

The American Medical Association also has made arangements to obtain prints for state and county society film libraries. Societies interested in purchasing a print at cost may write to the AMA Public Relations Department. Details on distribution methods will be made available later.

TOP SPEAKERS BILLED ON RURAL HEALTH PROGRAM

Here's a brief glance at the "theater marquee" for the Rural Health Conference February 27-28 at the Roanoke Hotel, Roanoke, Virginia.

Principal "stars" include: Friday morning—*Dr. F. S. Crockett,* chairman of the AMA's Council on Rural Health, reviewing the last seven years in "Looking Back to Look Ahead." Friday afternoon . . . *Dr. Carll S. Mundy,* vice chairman of the Council, explaining various phases of financing rural medical care . . . *Frank Peck,* managing

(Continued on Page 20)

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TOP SPEAKERS BILLED ON RURAL HEALTH PROGRAM

(Continued from Page 18)

director, Farm Foundations, Chicago, "The Missing Item in the Family Budget" . . . *Eugene Butler,* editor, *Progressive Farmer,* Dallas, "Problems of Medical Care in the South."

Saturday morning, a series of success and accomplishment stories—*Miss Lilyan Zindell,* administrator of Perry County Memorial Hospital, Perryville, Missouri, will tell how a community planned and constructed a community hospital . . . *Dr. Edmund Yantes,* Wilmington, Ohio, will give a follow-up on the Clinton County Survey on over-all health problems in that area . . . *Dr. B. N. Salzman,* Mountain Home, Arkansas, will present a new general practitioner's viewpoint on facing problems in a rural community . . . *Dr. Felix Underwood,* director, Mississippi State Department of Health, will discuss medical scholarships.

Winding up the conference at Saturday's luncheon, *Dr. Louis H. Bauer,* AMA president, will tell "What Medicine Is Doing"—pointing out the Association's many services to its physician-members and the general public.

DOCTOR BAUER WRITES HEALTH COLUMN

"Health for Today," an authoritative health column by Dr. W. W. Bauer, director of the AMA's Bureau of Health Education, will be syndicated six days a week from coast-to-coast through King Features Syndicate. The first article will appear January 5, 1953. In his column, Dr. Bauer will discuss mainly health subjects rather than disease. He has received authorization from the Board of Trustees.

BIGGEST AMA MEETING ON RECORD PLANNED

Hardly is the debris swept away from one AMA meeting when it's time to plan another . . . especially, when the next annual meeting of the Association is expected to top all previous records—including the total attendance of 15,667 physicians made at the centennial session of 1947 at Atlantic City.

As early as last spring, AMA headquarters staff men settled preliminary arrangements with contractors, truckers, decorators and convention hall officials for the June meeting to be held in New York City.

During the first part of January, more than 5,280 square feet of exhibit space will be sold to approximately 350 commercial firms. Space has been allotted on the first three floors for the Technical Exposition and on the fourth floor for the Scientific Exhibit.

More than 12,000 hotel rooms in New York have been pledged for the convention. Physicians planning to attend the meeting may make their reservations as soon as the hotel advertisement appears in *The Journal of the AMA.*

NEW FILM CATALOG

A revised list of medical and health films has been prepared by the AMA's Committee on Medical Motion Pictures. Brief descriptions, running time, and rules and regulations are included in the catalog for 78 medical films which are available from the Committee. Copies of the list may be obtained from the Committee.

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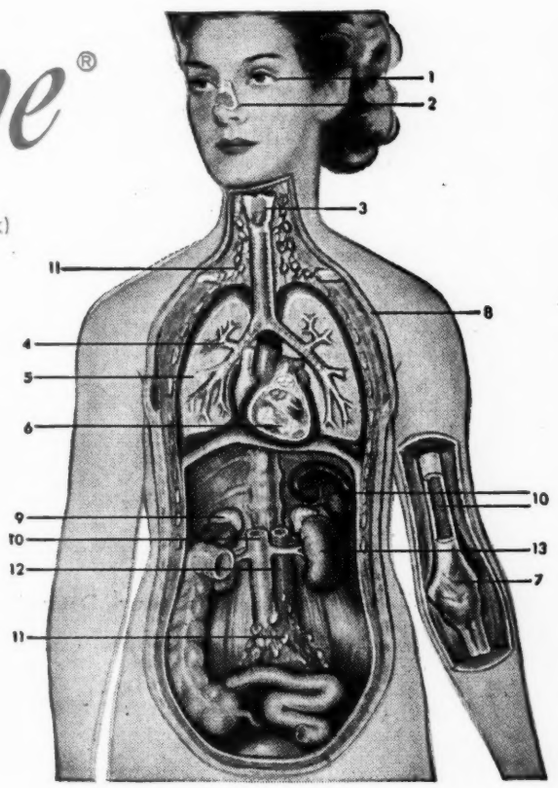

Primary Site of Pathology and Indications

1. EYE—Inflammatory eye disease. **2. NOSE**—Intractable hay fever. **3. LARYNX**—Laryngeal edema (allergic). **4. BRONCHI**—Intractable bronchial asthma. **5. LUNG**—Sarcoidosis. **6. HEART**—Acute rheumatic fever with carditis. **7. BONES AND JOINTS**—Rheumatoid arthritis; Rheumatoid spondylitis; Acute gouty arthritis; Still's Disease; Psoriatic arthritis. **8. SKIN AND CONNECTIVE TISSUE**—Pemphigus; Exfoliative dermatitis; Atopic dermatitis; Disseminated lupus erythematosus; Scleroderma (early); Dermatomyositis; Poison Ivy. **9. ADRENAL GLAND**—Congenital adrenal hyperplasia; Addison's Disease; Adrenalectomy for hypertension, Cushing's Syndrome, and neoplastic diseases. **10. BLOOD, BONE MARROW, AND SPLEEN**—Allergic purpura; Acute leukemia† (lymphocytic or granulocytic); Chronic lymphatic leukemia.† **11. LYMPH NODES**—Lymphosarcoma†; Hodgkin's Disease†. **12. ARTERIES AND CONNECTIVE TISSUE**—Periarteritis nodosa (early). **13. KIDNEY**—Nephrotic Syndrome, without uremia (to induce withdrawal diuresis). **14. VARIOUS TISSUES**—Sarcoidosis; Angioneurotic edema; Drug sensitization; Serum sickness; Waterhouse-Friderichsen Syndrome.

†Transient beneficial effects.

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1951

June 27	Arch Walls, M.D., Detroit	Family Doctor
July 4	R. J. Mason, M.D., Birmingham	Polio
July 14	L. A. Pratt, M.D., Detroit	Medical Associates
July 18	J. E. Croushore, M.D., Detroit	Tonsils
July 25	Frank Van Schoick, M.D., Jackson	Rheumatic Heart
August 1	O. C. Foster, M.D., Detroit	Pre-Natal and Post-Natal Care
August 8	O. D. Stryker, M.D., Mt. Clemens	Infectious Diarrhea
August 15	E. G. Merritt, M.D., Detroit	Home Nursing Programs
August 22	A. H. Whittaker, M.D., Detroit	Industrial Health
August 29	J. C. Montgomery, M.D., Detroit	Pre-School Clinics
September 5	J. I. Hauser, M.D., Detroit	Colds and Antihistamines
September 12	G. C. Thosteson, M.D., Detroit	Diabetes
September 19	Carleton Dean, M.D., Lansing	Crippled Children
September 26	Harold Henderson, M.D., Detroit	Fears of Pregnancy
October 3	A. T. MacGregor, M.D., Brighton	Value of Small Hospitals
October 10	J. J. Lightbody, M.D., Detroit	New Arthritis Theories
October 17	W. B. Cooksey, M.D., Detroit F. D. Johnston, M.D., Ann Arbor	Cardiac Catheterization and Surgery
October 24	Jack Rom, M.D., Detroit	Allergies
October 31	R. W. Waggoner, M.D., Ann Arbor	Emotional Factors and Diseases
November 7	J. S. DeTar, M.D., Milan	Michigan Rural Health Council
November 14	A. W. Strom, M.D., Hillsdale	Hillsdale Cancer Detection Plan
November 21	B. E. Brush, M.D., Detroit	Goiter and Iodized Salt
November 26	Gordon H. Scott, Ph.D., Wayne Univ., Detroit O. O. Beck, M.D., Birmingham	Funds for Wayne University
December 5	W. S. Reveno, M.D., Detroit	Modern Preventive Medicine
December 12	F. A. Weiser, M.D., Detroit	Problems in Living Longer
December 19	H. B. Zemmer, M.D., Detroit	Rural Medical Service and Health
December 26	E. J. Hill, Jr., M.D., Detroit	Plastic Surgery

1952

January 2	J. G. Molner, M.D., Detroit	Health in Detroit
January 9	E. D. Spalding, M.D., Detroit	Diet
January 16	A. E. Schiller, M.D., Detroit	Skin Diseases
January 21	L. W. Hull, M.D., Detroit	Urology
February 4	F. J. Fischer, M.D., Detroit	Care of the Feet
February 11	H. B. Fenech, M.D., Detroit	Surgical Rehabilitation
February 18	O. K. Engelke, M.D., Ann Arbor	Public Health and Preventive Medicine
February 25	F. D. Johnston, M.D., Ann Arbor C. R. Lam, M.D., Detroit R. F. Ziegler, M.D., Detroit	Heart Research in Michigan
March 3	H. W. Woughter, M.D., Flint	Veteran Amputees
March 10	R. H. Pino, M.D., Detroit	Doctors and Insurance Health Plans
March 17	J. L. Kubanek, M.D., Dearborn	Nervous Breakdowns
March 24	J. E. Livesay, M.D., Flint	Radiology
March 31	H. A. Price, M.D., Detroit	Underweight Patient
April 7	Carleton Dean, M.D., Lansing	Crippled Children's Commission
April 14	C. E. Umphrey, M.D., Detroit	Tumors
April 21	F. E. Ludwig, M.D., Port Huron	Mental Health of Youngsters
April 30	E. C. Long, M.D., Monroe	Appendix
May 7	H. L. Weston, M.D., Detroit	Care of the Eyes
May 14	L. G. Waggoner, M.D., Detroit	Bronchoscopy
May 21	J. E. Livesay, M.D., Flint A. L. Tuuri, M.D., Flint	Mott Foundation
May 28	E. A. Osius, M.D., Detroit	Hernia
June 4	D. H. Kaump, M.D., Detroit	What You Should Know About Your Blood
June 11	B. M. Harris, M.D., Ypsilanti Mr. Daniel E. Ford, Detroit	Gall Bladder
June 18	J. L. Posch, M.D., Detroit	Normal Hands
June 25	O. B. McGillicuddy, M.D., Lansing	Care of the Ears
July 2	R. J. Mason, M.D., Birmingham	Pediatrics
July 16	G. C. Penberthy, M.D., Detroit	First Aid
July 23	I. J. Hauser, M.D., Detroit	Smoking
July 30	D. B. Wiley, M.D., Utica	Safety in Childbirth

1952

August 6	L. Dell Henry, M.D., Ann Arbor	Care of Ears and Nose in Children
August 13	G. V. Conover, M.D., Flint	Cataract
August 20	H. M. Bishop, M.D., Saginaw	Liver
August 27	Henry Turkel, M.D., Detroit	Biopsy
September 1	FILM SHOWN	Lucky Junior
September 8	G. E. Millard, M.D., Detroit	Peptic Ulcer
September 15	C. A. Ludwig, M.D., Port Huron	Advancement of Medicine
September 22	J. R. Rodger, M.D., Bellaire	MSMS Annual Session
September 29	C. P. Mehas, M.D., Pontiac	Alcoholism
October 6	A. E. Palmer, M.D., Detroit	Care of the Skin
October 13	G. T. McKean, M.D., Detroit	Tuberculosis
October 20	Louis Jaffe, M.D., Detroit	Civil Defense Medicine
October 27	Arch Walls, M.D., Detroit	Do's and Dont's for Colds
November 3	R. J. Elvidge, M.D., Detroit	Gastro Disturbances of Alimentary Canal
November 10	J. B. Blodgett, M.D., Detroit	Heart Surgery
November 17	W. M. LeFevre, M.D., Muskegon	Detection of the Diabetic
November 24	Howard Lewis, Ph.D., Ann Arbor	Amino Acids
December 1	George J. Curry, M.D., Flint	Trauma
December 8	Joseph A. Witter, M.D., Detroit	High Blood Pressure
December 15	Ralph A. Johnson, M.D., Detroit	Old Age Diseases
December 29	W. B. Harm, M.D., Detroit	Holiday Medicine

1953

January 5	Ivan C. Berlien, M.D., Detroit	Psychiatry in Modern Medicine
January 12	W. H. Gordon, M.D., Detroit	Your Doctor in War

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*Howorth, M. Beckett, p. 324, "A Textbook of Orthopedics," W. B. Saunders, 1952.

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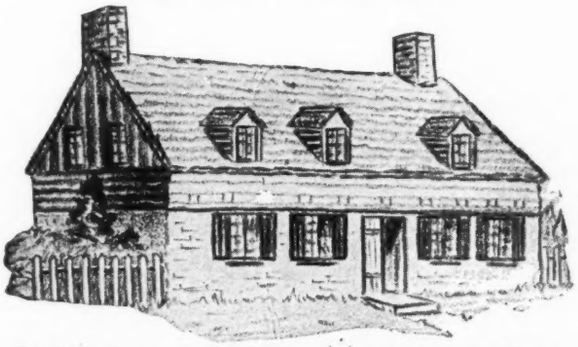

"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's medical men."—Otto O. Beck, M.D.

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Cancer Comment

A 100 PER CENT FOLLOW-UP RECORD OF CANCER PATIENTS

Approximately 13 per cent of all malignant neoplasms seen in the University Hospital, Ann Arbor, are in the gynecological field of clinical practice. Since July 1, 1931, this department has maintained a 100 per cent follow-up on all cancer cases coming within its service. This is a record unique and unparalleled in this or any other country.

Other reports have been made on complete follow-up on selected groups of cases, usually comparatively few in number and for a five-year period. As of December 31, 1950, the University Hospital record comprised 2,988 cases of cancer of the female genitalia, of which 1,999 were of the cervix, 428 of the endometrium, and the remainder, 561 cases, in other parts of the genital tract.

Methods required to meet this enviable goal have required endless perseverance on the part of Norman F. Miller, M.D., head of the department, and his staff as well as the co-operation of many other hospital departments, of which the departments of Pathology, Irradiation Therapy and Social Service were particularly helpful. Securing the necessary data required much correspondence, many telephone inquiries, personal interviews and searching of death records in various health department archives.

Certain phases of this nineteen-year study merit some discussion. Since the great majority of these 2,988 patients have been referred by physicians from various parts of Michigan, the anatomic distribution of their malignancies varies somewhat from the normal incidence of cancer in the female reproductive organs. Less than 8 per cent of the cases were of ovarian origin, compared to the usual incidence of 15 per cent to 20 per cent. Approximately two-thirds of the cases were of the cervix which emphasizes the great preponderance of cases of cancer seen in this tissue in comparison with other female genital tissues.

The following table of distribution of cancer cases is taken from the Nineteenth Annual Gynecology Tumor Conference Report, 1931-1950, published in the University of Michigan Medical Bulletin, October, 1951.

DISTRIBUTION OF 2,988 MALIGNANCIES OF THE FEMALE GENITAL TRACT STUDIED BY THE GYNECOLOGY TUMOR CONFERENCE
(July 1, 1931, to December 31, 1950)

Diagnosis	Number of Neoplasms	Percentage of all Neoplasms Seen
Carcinoma of Cervix Uteri	1,999	66.9
Carcinoma of Endometrium	428	14.3
Carcinoma of Uterus (Site of Origin Unknown)	7	0.2
Carcinoma of Ovary	230	7.7
Carcinoma of Vagina	55	1.8
Carcinoma of Vulva	117	3.9
Carcinoma of Clitoris	20	0.7
Carcinoma of Fallopian Tube	3	0.1
Carcinoma of Bartholin Gland	2	0.1
Sarcoma of Uterus (Cervix or Corpus)	36	1.2
Carcinoma and Sarcoma of Body of Uterus	4	0.1
Chorioepithelioma	15	0.5
Pelvic Malignancy, Unclassified	68	2.3
Sarcoma of Vagina	4	0.1
Total	2,988	

Over the years, the treatment of cancer of the cervix has been largely by irradiation. Recently, selected cases have had surgical therapy but no conclusions are advanced on this treatment because of the small number of cases.

The five-year absolute survival rate for all cervical cancers has increased from 38.7 per cent for 1931 cases, to 47.2 per cent for 1945 cases. The fact that well over half of all cancers of the cervix included in this nineteen-year report are in Grades III and IV, or advanced stage, emphasizes anew the need for a greatly intensified lay educational campaign to bring these patients to their physicians in much earlier stages of their disease.

The question of the value of continuing follow-up studies of this kind after a period of 10 to 15 years often has been raised. The likelihood of death from advancing age or other causes reduces the number of survivors to a point where percentages are easily distorted. However the reports under discussion emphasize the point that persistence of effort and the utilization of all means can bring the desired results. In too many cases, such efforts begun with the best of intention fail because of discouragements encountered as the time lengthens into decades and longer. It is fortunate, indeed, that Dr. Miller has chosen to continue this study in spite of all discouragements that must be met to keep the record accurate and complete. The report for the Twentieth Year, 1931-1951, is in preparation and will soon be issued.

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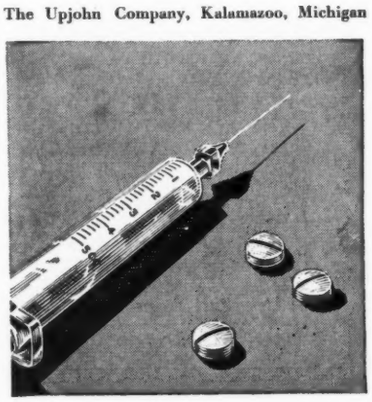

Wayne Medical Alumni Reach Half Way Mark!

Below are two analyses of the $200,000 campaign for a Medical Library Fund being carried on by the Alumni Association of the Wayne University College of Medicine. To date, 702 pledges have been received for a total of $95,286.00.

The alumni practicing in the state were approached through Regional Chairmen, following more or less County Societies' boundaries. As the primary objective of both the AMEF and the Wayne alumni is to have every doctor of medicine contribute annually to medical education according to his means, the Regions have been listed according to the percentage of doctors subscribing. Alpena leads with 100 per cent.

Another approach was through Class Chairmen. Their reports have been listed in a comparable way.

(Continued on Page 28)

ANALYSIS OF TOTAL AMOUNT REPORTED TO DATE BY CLASSES
December 1, 1952

Class	Chairman	No. in Class	Number Pledged	Percentage Pledged	Total Amount
1928 (9)	Lee Hileman, M.D.	30	21	70%	$ 3,285.00
1924 (7)	Perry P. Burnstine, M.D.	20	11	55%	3,575.00
1925 (6)	Thaddeus Stokfisz, M.D.	24	13	54%	3,675.00
1908	J. Milton Robb, M.D.	15	8	53%	1,325.00
1936 (4)	Elwood Jenkins, M.D.	66	32	49%	4,100.00
1929 (3)	Harry Carl Wissman, M.D.	46	21	46%	4,220.00
1935 (1)	W. Kenneth Tregenza, M.D.	71	31	44%	6,660.00
1920 (2)	Clarence I. Owen, M.D.	34	15	44%	4,770.00
1943-M. (8)	Alexander Blain, III, M.D.	66	29	44%	3,510.00
1930	Marion Jocz, M.D.	37	16	43%	2,885.00
1939 (5)	Sidney Friedlaender, M.D.	71	30	42%	3,985.00
1919 (10)	Hellmuth A. Meinecke, M.D.	24	10	42%	2,945.00
1927	A. E. Vossler, M.D.	31	13	42%	2,090.00
1931	J. Tapert, M.D.	48	19	40%	2,405.00
1941	Benjamin Jeffries, M.D.	58	24	40%	2,390.00
1933	D. A. Cameron, M.D.	58	23	40%	1,910.00
1942	George H. Andries, M.D.	52	17	35%	1,760.00
1934	Ben Juliar, M.D.	61	21	34%	2,135.00
1902	William E. Keane, M.D.	18	6	33%	755.00
1918	Ray S. Dixon, M.D.	15	5	33%	115.00
1943-D.	Howard A. Klein, M.D.	56	18	32%	1,745.00
1881-thru 1900	Committee of Five: Clark D. Brooks, M.D., '05; H. W. Cadieux, M.D., '96; W. D. Ford, M.D., '99; Louis J. Hirschman, M.D., '99; J. Milton Robb, M.D., '08	82	24	29%	2,271.00
1937	Milton Jerome Rueger, M.D.	80	23	29%	2,240.00
1938	F. C. Jewell, Jr., M.D.	73	21	29%	1,450.00
1921	V. N. Butler, M.D.	41	12	29%	1,100.00
1915	F. W. Gottschalk, M.D.	29	8	28%	385.00
1932	Paul L. Cusick, M.D.	64	17	27%	1,715.00
1926	Stanley C. Fenton, M.D.	44	12	27%	805.00
1917	Hartman A. Lichtwardt, M.D.	47	12	26%	1,510.00
1943-J.	Ronald E. Clark, M.D.	65	16	25%	2,050.00
1904	C. Bradford Lundy, M.D.	20	5	25%	150.00
1901	Allen McDonald, M.D.	8	2	25%	25.00
1916	Don A. Cohoe, M.D.	33	8	24%	2,315.00
1914	A. E. Schiller, M.D.	33	8	24%	2,175.00
1905	Henry A. Luce, M.D.	17	4	24%	900.00
1906	Alexander W. Blain, M.D.	17	4	24%	825.00
1912	Clarence Candler, M.D.	25	6	24%	500.00
1922	Ruth Wagner, M.D.	18	4	22%	325.00
1910	Rene J. St. Louis, M.D.	19	4	20%	1,150.00
1911	Harry Dibble, M.D.	20	4	20%	260.00
1944	Stella M. Delaini, M.D.	68	13	19%	1,312.00
1940	John M. Pendy, M.D.	59	11	19%	1,225.00
1909	Euclid Joinville, M.D.	16	3	19%	900.00
1903	C. E. Simpson, M.D.	12	2	17%	110.00
1951	R. V. Walker, Jr., M.D.	62	10	16%	54.00
1948	William Frank Trinkaus, M.D.	54	8	15%	465.00
1907	Ray C. Andries, M.D.	26	4	15%	270.00
1913	Robert C. Moehlig, M.D.	7	1	14%	200.00
1947	Hugh W. Henderson, M.D.	62	8	13%	440.00
1945	Francis Martin, M.D.	68	7	10%	510.00
1950	Murray W. Hess, M.D.	58	6	10%	485.00
1946	Richard C. Sargent, M.D.	53	5	9%	355.00
1949	Armon Shekerjian, M.D.	36	3	9%	50.00
	Special		44		6,519.00
	Totals	2,217	702	32%	$95,286.00

In addition, members of the classes of 1951 and 1952 have pledged $1,000 each, payable starting ten years after graduation, for a total of $95,000.00.

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no odor or after-odor, no taste or after-taste

YOUR prudent and assuring explanations will help—clearing away the jungle of her doubts and fears. Then SULESTREX will help—in controlling the physical symptoms of the climacteric.

Years of search have given you SULESTREX—an odorless, absolutely pure, crystalline estrogen, chemically standardized for unvarying hormonal activity. Unexcelled—therapeutically *and* esthetically—these tiny uncoated tablets will never insult the breath or perspiration, never annoy with "after-taste."

A new report by Reich and associates[1] confirms and extends his conclusions from his pilot study[2]...

"***Piperazine estrone sulfate*** **(SULESTREX)** ***is a clinically effective oral estrogenic substance, easy to administer and extremely well tolerated. Its action is accompanied with an amazingly low incidence of side reactions.***"

175 patients were included in this latest study, 50 of whom received therapy to relieve postpartum breast engorgement.

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1. Reich, W. J., et al. (1952), A Recent Advance in Estrogen Therapy. II. Amer. J. Obst. & Gynec., 64:174, July. 2. Reich, W. J., et al. (1951), A Recent Advance in Estrogen Therapy. I. Amer. J. Obst. & Gynec., 62:427, August.

1-81

WAYNE MEDICAL ALUMNI REACH HALF WAY MARK

(Continued from Page 26)

The ten leading Regions and Classes pledging the highest amounts have numbers in front of the Chairmen's names.

Contributions have ranged from $1 to $2,000. The present students each have given $1 to show their goodwill. Many of the interns have pledged at a rate of $10, while the more prosperous doctors have pledged $300 or more, with payments on an annual basis. Twenty-one have pledged $1,000, payable over a ten-year period.

The contributions are tax deductible, and the AMEF is giving full credit to each individual doctor in its annual report.

ANALYSIS OF AMOUNT REPORTED TO DATE BY REGIONS
December 1, 1952

Region		Chairman	No. in Region	Number Pledged	Percentage Pledged	Total Amount
Alpena-Alcona-Presque Isle		Joe A. Ramsey, M.D., '36	5	5	100%	$ 450.00
Wayne-Northville		Wilbur J. Steininger, M.D., '43	5	4	80%	310.00
Tuscola		Ewald C. Swanson, M.D., '31	6	4	67%	200.00
Wayne-Allen Park		Morris Kazdan, M.D., '35	11	7	64%	675.00
Washtenaw	(1)	John S. DeTar, M.D., '31 J. J. Woods, M.D., '24	23	14	61%	3,135.00
Ottawa		W. C. Kools, M.D., '17	10	6	60%	610.00
Wayne-Wyandotte		Nicholas D. McGlaughlin, M.D., '38	10	6	60%	445.00
Wayne-Ecorse		Lawrence H. VanBecelaere, M.D., '17	5	3	60%	625.00
Oakland-Royal Oak	(3)	Roman E. Boucher, M.D., '35	19	11	58%	2,555.00
Genesee	(2)	Henry Cook, M.D., '09	40	21	53%	2,800.00
Grand Traverse-Leelanau-Benzie		Joseph Zimmerman, M.D., '29	14	7	50%	345.00
North Central Society	(10)	Louis F. Hayes, M.D., '47	8	4	50%	850.00
Montcalm-Ionia		L. S. Dunkin, M.D., '21	8	4	50%	400.00
Lapeer		Adolph T. Rehn, M.D., '34	11	5	45%	700.00
Wayne-Lincoln Park		Dan R. Herkimer, M.D., '27	9	4	44%	425.00
Allegan, Barry and Van Buren		Kenneth C. Miller, M.D., '44	9	4	44%	280.00
Gratiot-Isabella-Clare		Joseph H. Bergin, M.D., '28	14	6	43%	385.00
Chippewa-Mackinac and Luce	(4)	B. T. Montgomery, M.D., '24	15	6	40%	1,820.00
Wayne-River Rouge	(6)	Ernest E. Belanger, M.D., '39	10	4	40%	1,300.00
Monroe		Edgar C. Long, M.D., '31	5	2	40%	200.00
Wayne-Garden City		Leslie P. Haefele, M.D., '34	16	6	38%	655.00
Macomb	(7)	Russell F. Salot, M.D., '28	23	8	35%	1,065.00
Ingham, Eaton and Livingston	(5)	B. Edward McNamara, M.D., '43	38	13	34%	1,455.00
Kent		George H. Southwick, M.D., '10	33	10	30%	562.00
Jackson and Hillsdale		Morton P. Bates, M.D., '43	24	7	29%	585.00
Oakland-Pontiac		L. Jerome Fink, M.D., '44	36	9	25%	710.00
Northern Michigan Society		Walter Larson, M.D., '31	12	3	25%	310.00
Sanilac		R. K. Hart, M.D., '28	8	2	25%	35.00
Lenawee		Arthur S. Pasternacki, M.D., '29	13	3	23%	310.00
Calhoun and Branch		Wilfrid H. Haughey, M.D., '06	13	3	23%	205.00
Oakland-Birmingham		George P. Raynale, M.D., '02	18	4	22%	450.00
Shiawassee and Clinton		Julius Janci, M.D., '35	10	2	20%	200.00
Saginaw		Lloyd C. Harvie, M.D., '18	21	4	19%	540.00
Wayne-Dearborn	(9)	Eugene H. Quigley, M.D., '38	40	7	18%	1,025.00
St. Clair		Donald A. Koch, M.D., '35	17	3	18%	400.00
Oakland-Ferndale	(8)	Eugene L. Spoehr, M.D., '26	18	3	17%	1,060.00
Berrien and Cass		Richard C. Crowell, M.D., '33	12	2	17%	200.00
Mason		Ephraim B. Boldyreff, M.D., '43	12	2	17%	110.00
Kalamazoo and St. Joseph		Kenneth L. Crawford, M.D., '29	19	2	11%	310.00
Muskegon		Charles A. Teifer, M.D., '16	9	1	11%	25.00
Bay-Arenac-Iosco and Midland		Joseph H. Sherk, M.D., '07	12	0	0	0
Delta-Marquette		Harry J. Defnet, M.D., '16	6	0	0	0
Huron		Charles I. Herrington, M.D., '19	3	0	0	0
Totals			650	221	34%	$28,722.00

Top ten leading in amounts as numbered.

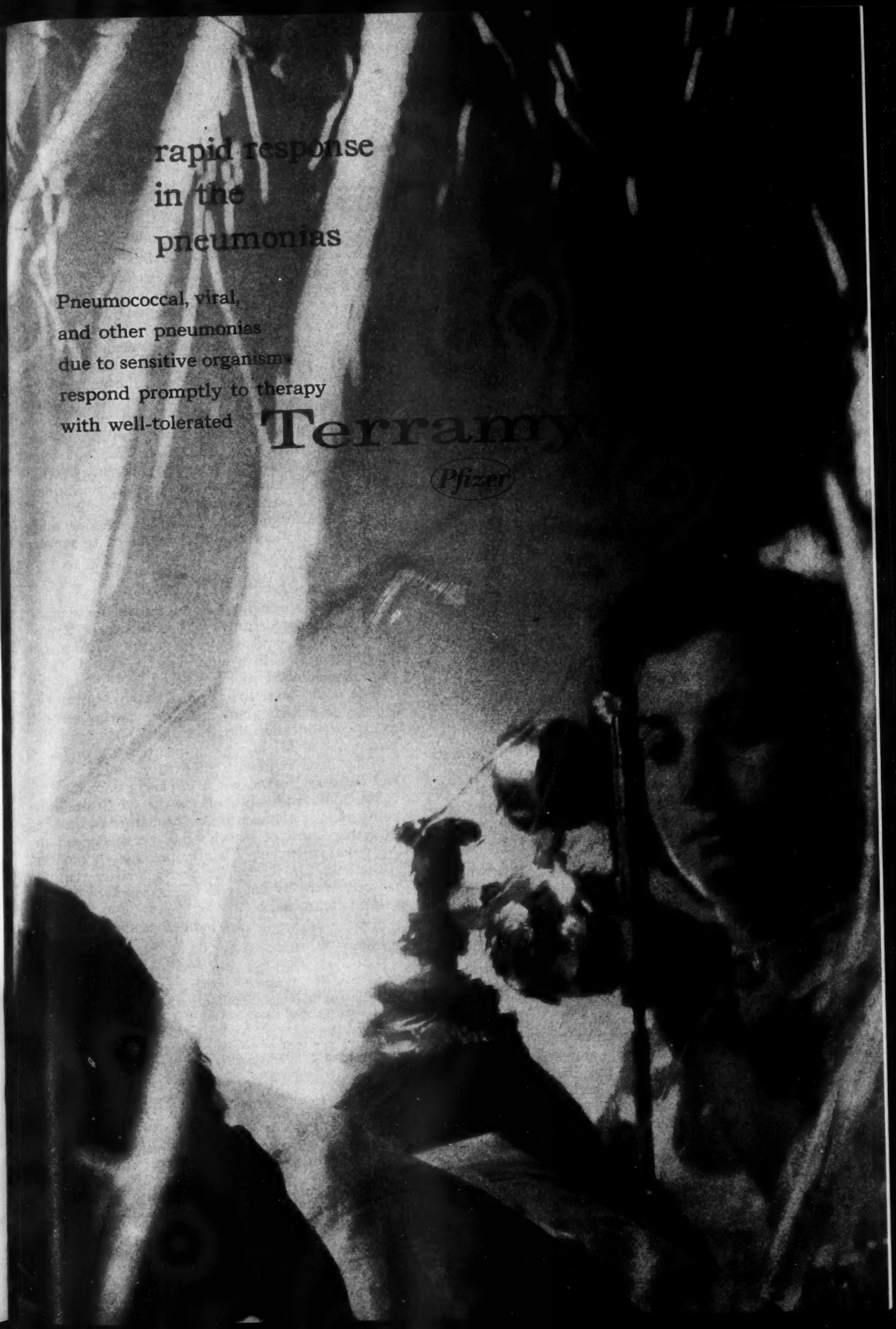
MEDICAL EDUCATION CAMPAIGN

The National Fund for Medical Education, with offices in New York, is launching a five-million dollar industry-wide solicitation campaign in support of medical education in the United States.

Colby M. Chester, newly appointed chairman of the fund's Committee of American Industry, will direct a nation-wide organization to mobilize business concerns behind the nation's hard-pressed medical schools. Mr. Chester is honorary chairman of the board of General Foods Corporation.

The National Fund for Medical Education is a lay organization which is working in conjunction with the American Medical Education Foundation, founded by the American Medical Association two years ago. The AMEF's goal for 1953 is included in the five million dollars.

The National Fund's Committee of American Industry, which will spearhead the campaign, will be composed of 100 ranking business leaders from every segment of industry. Their task will be to educate industry as to the critical needs of the medical schools. The committee contemplates solicitation of 25,000 American business concerns during 1953. Mr. Chester plans to appoint a vice chairman, an advisory council, and division chairmen, who will direct the activities of more than 50 industrial committees. E. J. Ade, New York, has been appointed fund-raising director for the campaign.


rapid response
in the
pneumonias
Pneumococcal, viral,
and other pneumonias
due to sensitive organisms
respond promptly to therapy
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Editorial Comment

BOOK ON CANCER SENT TO SCHOOLS

Michigan high school students—some of them, anyway—are going to be brought up with a knowledge of cancer, and what to do about it, by virtue of a book especially prepared for that purpose by the Michigan State Medical Society.

The book, a 68-page pamphlet-text, was prepared principally by Dr. F. L. Rector, secretary of the society's cancer control committee, and copies have been sent to all of Michigan's 750-odd public and parochial high schools.

The purpose is to encourage teaching about cancer as part of anyone's normal education, without any "scare technique," but simply a matter-of-fact discussion of how to detect signs of early cancer, and what to do to cure it.

Occurs at Any Age

The book is called "The Story of Cancer for High Schools," and points out that cancer can occur at any age, even though the biggest death toll is between the ages of fifty-five and seventy-five.

In 1951, Michigan had 92 cancer deaths among children under five; 36 from five to nine; 29 from ten to fourteen; 40 from fifteen to nineteen. From that age the number rose gradually to 1,350 in the age brackets sixty to sixty-four, and sixty-five to seventy.

The Michigan Department of Health and the Michigan division of the American Cancer Society paid a large part of the cost of printing the first 5,000 copies, with five going to each high school.

However, it was anticipated that some schools would want more and the demand already is starting to come in.

Ask More Copies

In the southeastern division of the Cancer Society (Wayne, Oakland and Macomb counties) about thirty-five schools already have asked for more books, Edward W. Tuescher, executive director of the division, said. Another printing is now being planned. Said Tuescher:

"We think it will be money well spent. The book is excellent, in addition to material we already have made available to the schools."

The book is, however, the first publication specifically designed to teach high school classes the basic facts about cancer and how to combat it.

It also lists supplementary texts, magazines and motion picture films on the subject. Detroit schools, in fact, already have had nearly all of that material made available through the cancer society, along with five motion picture films on the subject.

Shows Cancer Growth

In general, the idea is to include cancer education as part of high school science classes; whether any schools might insert a special course devoted to cancer is a matter of speculation.

The text is written in straight-forward language, neither too technical for ready understanding, nor in oversimplified "popular" form. It explains how cancer cells, multiply far beyond the normal rate, rob normal tissues of nourishment and, in fact, actually "starve healthy tissues to death."

Also included are photographs, drawings and charts, showing how cancer spreads, but more particularly showing cancer in early stages when it still can be cured by surgery, x-ray or radium.

The book warns against quack remedies, with particular caution against pastes, salves or other medicines, or "secret' potions supposed to prevent cancer.

Author Praised

Emphasis throughout is on the theme that:

"Young people can help control cancer by understanding it, and by replacing an unreasonable fear of cancer with a sane, sensible, cautious attitude toward the problem."

The book, from the personal standpoint of Dr. Rector, is a high point in a long career devoted to cancer education, Dr. Norman F. Miller of the University of Michigan commented in a preface:

"The book represents more than a progressive and necessary forward step in cancer education.

"It began with and reflects the work and farsightedness of a man who has probably saved more lives than most of us who daily are engaged in the actual treatment of cancer patients. A pioneer in the field, Dr. Rector for over a quarter century has been actively engaged in the work of telling people about cancer."

—Jack Pickering in
The Detroit Times,
Nov. 27, 1952.

Carcinoma is found simultaneously in both breasts in about 1 per cent of cases.

* * *

About 5 per cent of patients treated for carcinoma of the breast will later develop the disease in the other breast.

* * *

About 60 per cent of patients with breast cancer have axillary metastases when first seen.

* * *

Almost 100 per cent of *late* pelvic malignancy can be diagnosed easily and almost none of it cured.

* * *

There is no magic key to the diagnosis of early malignancy in any tissue.

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The Importance of History and Physical Examination in the Diagnosis of Heart Disease

By Samuel A. Levine, M.D.

Boston, Massachusetts

MR. PRESIDENT and friends, I want to thank you all and the officers of the Michigan Heart Association and the Michigan State Medical Society for asking me to come here. I have seen a good many old friends here. It reminds me of what has been going on in Boston. When I was a little boy at school, I recall that Boston was the fourth largest city in the country; New York, Chicago, Philadelphia, Boston, and St. Louis. Since those early days, Boston has sunk to fifth, sixth, seventh, eighth, and is now maybe ninth or tenth. Detroit has come up pretty high on the scale. Boston has been stagnant as far as physical growth, but I comfort myself with the thought that it may not have been altogether static as far as medical matters are concerned. There are so many fellows around here who are reputable citizens of our medical community who must be proud of their early training in Boston.

I want to spend this session in discussing what a doctor may do in his office, at the bedside, or at a patient's home in trying to arrive at a diagnosis and indicate a course of therapy when cardiac problems are involved. It is amazing that in the field of heart disease, a great deal can be accomplished with the simple methods we all have with us, in our heads and in our bags. That is not true of many aspects of medicine. You cannot make a diagnosis of cancer of the colon or other gastrointestinal pathology by these simple means. This requires x-ray study for diagnosis. It is extraordinary how many cardiac diagnoses you can make just on your own, and it is this point of view that I would like to emphasize here this noon.

First, the past history.—Everybody that comes to the doctor for the first time should be asked whether he ever had chorea or rheumatic fever. If the answer is in the positive, you would immediately say there is an even chance that there is a valve lesion. That is considerable reward for a simple question. There are not many questions that you could ask in a past history that would give you as much information as that . If anybody says that he had rheumatic fever, you would immediately say, "There is an even chance that I am going to find heart trouble with some valvular lesion." You are all the more driven to look carefully for the signs of valvular disease. You would spend a little more time with auscultation than you would with a patient who comes to you with a broken leg or has eczema. When you do not obtain a bona fide history of rheumatic fever and there is some reason to make you wonder about it, you must ask some other questions. Subsidiary evidence, such as a family history of rheumatic fever, will make you suspicious of a particular person and may be evidence in favor of rheumatic heart disease, because we know there is a familial factor in this disease. Did he have growing pains, an unusual degree of nose bleeds in childhood, or spring fever? Spring fever means something. Rheumatic children have their peaks of activity around March. It is curious that the surgeons in Boston are finding more active rheumatic carditis in the biopsies of the auricles in the last month or two than they did before. Dr. Dwight Harken and his men commented about that to me the other

Read before the Michigan Heart Association, Detroit, Michigan, March 14, 1952.

day. Many auricular appendages they are taking out are showing Aschoff nodules. You find them anyway now and again in people who have no evidence of any activity, but more have been occurring this spring. March, the Ides of March, is certainly a peak month in New England for rheumatic activity. Also, we should ask the patient whether he was ever refused life insurance because of a murmur. Such questioning may explain why some patients who have calcific aortic stenosis at the age of sixty have rheumatic aortic stenosis and not Monckeberg's sclerosis. You see some patients at the age of fifty or sixty with aortic stenosis who have symptoms for a year or so, but who were thrown down for insurance at the age of twenty because of a murmur. They did not have arteriosclerosis at the age of twenty. Yet, in fact, it took thirty or forty or more years to mature into a full blown aortic stenosis that you recognize at the age of fifty or sixty. Those little points are helpful in fitting together the jigsaw puzzle of rheumatic valvular disease.

The same thing is true about school examinations. Children are examined at school and you should inquire whether the doctor made a fuss about their hearts when they were young. You also should ask about murmurs at birth. That is not so helpful because murmurs are often overlooked at birth. What about a murmur heard during the first year of life? You do not see rheumatic fever the first year of life. These questions may help you to decide whether you are dealing with a congenital or an acquired lesion. Was there early cyanosis? Was there early squatting? Squatting in a child is a peculiar kind of habit and it makes you think of a congenital tetrology of Fallot. Did the mother have German measles during the first few months of pregnancy? If so, it would be more likely that the child has a congenital lesion. What month was the baby born? If a child was born during the months of May to August, inclusive, it is very unlikely to have patent ductus arteriosus. Dr. D. Rutstein, of Boston, has made an ingenious study. He found that children born during those months do not have patent ductus; the birth month of all the patients with patent ductus were scattered over the other months of the year. Such a clue may at times be helpful in diagnosis.

Family history.—There certainly are headache families, allergic families, neurotic families, and there are vascular families. These familial tendencies do not lead to an unequivocable diagnosis, but they lend support one way or another in doubtful cases. The easy diagnoses in medicine you never have to worry about. You do not have to worry about the diagnosis of exophthalmic goiter if the patient has exophthalmus, has a big goiter, and gives a complete history of a thyrotoxic state. The patient then knows the diagnosis himself. We have to worry about the diagnoses that are difficult to make. In those difficult diagnoses, you weigh all the evidence, and a little straw may make you lean in one direction or another. Certain kinds of distress in a person whose family is riddled with coronary artery disease would mean a good deal more than the same kind of distress in a person whose family is free of vascular disease and is riddled with neurotic disease. There are hypertensive families, there are rheumatic fever families, and there are coronary families.

Present illness.—Shortness of breath, of course, is a cardinal sign of left ventricular failure or cardiac insufficiency. But there are different kinds of shortness of breath. There is a shortness of breath that young people (less frequently; older people) have at rest. You can make the diagnosis often in one minute. Although they are short of breath at rest, they look well. While you take the history, you often see them go through the phenomenon of deep overventilation and sighing breathing. They cannot get enough air and that is practically pathognomonic of a neurotic, a function state. When a young fellow (or girl) takes in 2500 cc. of air with one breath and complains he does not get enough, he is taking in five times as much as he needs and he wants more. It only requires about 400 cc. per breath to breath normally. A cardiac who has true dyspnea could not ventilate that well if his life depended upon it. These functional patients overventilate. If you watch them, you see them take deep sighs. You should stop and say, "Is that what you mean? Were you short of breath then?" They generally reply, "Yes, I can't get enough air." That means there is a functional disturbance of some sort.

Paroxysmal nocturnal dyspnea. — Paroxysmal nocturnal dyspnea is the kind of breathlessness that wakes a person up at night. Sometimes, people wake up and feel short of breath, and turn right over in a few seconds or a few minutes and go

right back to sleep. That is not true paroxysmal nocturnal dyspnea. When paroxysmal nocturnal dyspnea awakens people from sleep, they stay awake for a while—five minutes, ten minutes, half an hour or more. They jump out of bed or sit on the edge of the bed. Sometimes they smoke a cigarette, and they think the cigarette is what made them feel better. It is the difference in posture that made them feel better. Or they go to the window, and open the window to get fresh air. It is not the fresh air as they might have done the same thing with stale air. It is posture. They sit up; there is less return flow to the right side of the heart and there is a chance for an equilibrium to take place between the left and right ventricular output. They feel better and go back to bed. Generally, they have a little wheeze with these spells and maybe a little cough. The wheeze and the cough and the postural change generally mean acute left ventricular failure, which is common in the hypertensive, in the coronary or the aortic case. It also may occur at times with mitral stenosis. The right ventricle as a result of a dream or some other cause puts out more blood into the lungs than the left ventricle can receive through the narrowed mitral valve. They have a temporary imbalance with pulmonary engorgement until the situation is rebalanced.

There is a peculiar kind of shortness of breath that you may see occasionally with acute pulmonary embolism. I do not mean the kind that is fatal immediately. Such patients breathe like a fish out of water, or as if they have a foreign body in their throat. They go through quite a gasp and yet do not take in much air. They struggle without much movement of the chest. The movement is mostly of the face and neck. This sign on occasions has helped me to suspect a pulmonary embolus. Paroxysmal noctournal dyspnea doesn't occur particularly in pulmonary emphysema with dyspnea of a bronchial nature. Such patients may lie flat comfortably and yet be short of breath on slight effort.

Palpitation.—A word about palpitations may be of interest. There is a lot we can learn about palpitations if we take a few minutes off and try to imitate the types of palpitations to our patient. If you see a patient in the attack, you can identify the condition as auricular fibrillation, tachycardia, extra systoles, et cetera. But they often have their attack when we are not present, and we can only make the diagnosis from the history. It is well to ask them, "Does it feel like this or like that?" (The physician tapping his chest rapidly and regularly, then rapidly and irregularly, and finally, normally with an occasional quick beat.) Often the patient will quickly say that it feels like this type or the other. It tells you that one is dealing with tachycardia of the auricle or fibrillation of the auricle, or possibly just extra systoles. This technique is much better than trying to guess at the diagnosis.

Pain.—Pain in the chest is the most difficult and the most important symptom to appraise. You have to talk to the patient quite a while to distinguish the different kinds of pain or distress. In angina pectoris the location, as you know, is mostly sternal rather than apical. You should ask the patient what the sensation feels like. He should describe the character of the pain in his own words. Do not write down "pain" because it ought to be a pain, for it is often not. It is frequently a constriction or pressure or burning or tightening or fullness. Write down the terms they use, where it is felt and how long it lasts. Where does it radiate and where does it start? Sometimes it starts peripherally and goes centrally, but more often it starts centrally and goes peripherally. And lastly, watch them while they describe it; that is very helpful. They go through different maneuvers than other kinds of pain will evoke or than the neurotic will utilize. They may say, "I have a funny feeling," and curl and clutch their fingers. A neurotic does not do that. The latter may say, "I have this awful pain here," pointing to the region of the apex; while the anginal patient will say, "I've got this funny feeling here," grasping the center of his vest. That is almost pathognomonic of coronary artery distress. Or they may say, "I don't know how to describe it." That is another type of reply. We should then write down in our notes, "I don't know how to describe it." There are people who cannot describe the sensation. That is their reply, and the only reply they can give. However, they may go through this peculiar clutching gesture. It means a good deal to observe that kind of reply. Of greatest importance is that anginal distress is related to physical effort. It particularly comes on walking or hurrying, carrying something, going up hill, in cold air, or after meals, or on emotional upsets. The exact relationship between effort and anginal pain is not altogether clear. It is peculiar

that some patients with angina can go through a good deal of effort indoors and cannot walk a block to the streetcar. They may be able to do a heavy day's work, swinging beams and going through all sorts of physical gyrations, and have no trouble, but they cannot walk home. To me it is not satisfying to explain this whole story on a matter of foot pounds of work. There are some other unknown factors involved, possibly vasomotor, neurogenic, skin changes et cetera.

There is a similar pain on effort in the right upper quadrant in some cases with right-sided failure, such as mitral stenosis in which the liver is congested. This pain is not anginal in nature, but probably due to stretching of the capsule of the liver. This may be regarded as right-sided embarrassment or insufficiency on effort. Dr. T. R. Harrison and his colleagues have recently written a very valuable paper on angina-like symptoms coming in cases with right ventricular strain (not coronary artery disease), such as mitral stenosis or pulmonary hypertension. There is one little point about the pain of angina that has been interesting to me. There are all sorts of tests for angina, anoxemia tests, two step tests, Ballistocardiograms, flicker photometer, and so forth. All these tests have been used to obtain information about coronary artery disease. But there is one test that so far has been almost invariably correct in my experience. It can only be applied if you see a patient while he has a spell. My presence evokes angina very often in my office. Patients come in feeling all right, sit down at my desk, and I begin taking the history. Before many minutes have elapsed, they begin to have an attack. I have had, therefore, a fair opportunity of seeing these people during anginal pain. Now, if I see a patient in a spell, I stop all work as I do not want the pain to disappear before I have performed this test. I listen over the precordium and massage the carotid sinus. If significant slowing of the heart occurs, the pain should lessen or disappear. You do not tell the patient what to expect. You should ask whether the discomfort is any worse, not if it is better. When you have to ask a leading question, you are more likely to learn the truth if you try to mislead the patient. It is better to ask a patient who may have anginal chest distress whether it goes into the right arm expecting him to reply that it radiates to the left arm. When this test is done and slowing occurs, the reply is likely to be, "No, that pain is gone" or "The pain is lighter." You would not want to talk him into saying that the pain is better. When he replies that the pain is gone or better it is angina. This effect will occur not in minutes but in seconds. In one case the pain disappeared during the prolonged asystole produced by carotid sinus stimulation while the heart was not beating. I have found this test very useful in some doubtful cases where the distress was confused with the symptoms of gall bladder disease. The interpretation of the test is only valid if slowing occurs, as I do not believe that pain due to causes other than angina will disappear in this fashion. If no slowing occurs, no conclusion can be drawn.

Let us now turn to another topic, i.e., masked thyrocardiacs. It is very important for us to look for the things we can do something about. That is much more important than making a detailed electrocardiographic diagnosis as to whether the infarction is lateral, posterior, or anterior. If you know the patient has coronary thrombosis, you treat him a good deal the same no matter where the infarct is. When thyrocardiac disease is overlooked, a curable or reversible condition is neglected. You will never have to worry about the cases that are easily recognized. The masked ones are being overlooked by all of us, including myself. You have to look for the subsidiary features of thyrotoxicosis such as sweating, accentuated heart sounds, failure to respond to digitalis, loss of weight with a good appetite; all the various clues that we know so well but we do not think about at the right time. Are the bowels too active? Chronic cardiacs who are bedridden or who have been sick a long time do not have normal bowel movements; they usually are constipated. Some of these patients say that they have bowel movements two or three times a day without any help. That is not normal for chronic cardiacs. Or at night they sleep with one sheet over them when everybody else in the family has all kinds of covers and blankets. They feel warm. I made a diagnosis walking into a cold bedroom of a patient who in the middle of the winter would sleep calmly with his feet sticking out beyond a simple bed sheet for a cover. Thyrotoxicosis had been entirely overlooked. The observation was enough to make me think of thyrotoxicosis. The suspicion was later confirmed and when the thyroid disease was cured, his angina practically disappeared. Early gray hair is a point to think about. Many normal people have early gray hair, but there are some peculiar people who have

it too. Amongst them are thyrotoxic individuals and patients who have or have had pernicious anemia.

Physical examination.—Let us now take up some points in physical examination. What does the patient look like? I think it is very valuable to get your impressions about people. I just mentioned early graying of the hair. Are they of the pernicious anemia type? It is a lot more important to recognize pernicious anemia than it is to detect cancer of the pancreas. We can cure one; we cannot do much about the other. Has the patient nice skin and soft, silky, gray hair, and smooth tongue? He may come to a physician with cardiac symptoms when all he needs is liver or Vitamin B_{12}. In fact, if you have been treating a patient for pernicious anemia anl you find a dirty tongue, you better revise your diagnosis. He may have a cord tumor rather than combined system disease. That mistake has been made in the best of medical circles. I recall a case that was diagnosed as pernicious anemia with combined system disease, but the tongue was dirty and that did not fit the diagnosis. It should have been smooth and clean. He had a cord tumor. That was cured and the combined system disease melted away. Another physical type is the sturdy, strong person who suggests coronary disease, or the slight stare of the eyes of thyroid patients. You may have nothing more than that to go by, a slight start, even a unilateral stare, one eye looking a little different than the other, not a true exophthalmos, but something asymmetrical about the expression of the eyes. That can be your clue. The flushed neck of the women who are or who are going to be hypertensive is another clue. They come in to your office and appear normal, but by the time you have taken their history, their neck is rosy and flushed. They are almost invariably hypertensive people, or candidates for hypertension.

Blood Pressure Determinations.—Start up high enough. Many a patient has his blood pressure read wrong because the doctor did not start high enough. He began his observation in the auscultatory gap. The first time you take the pressure, you ought to hold your finger at the wrist to be sure you start the reading above the systolic level. Then spend five seconds holding the mercury at the level at which the systolic reading first comes through and see whether there is any alternation. It is a simple sign, a valuable sign; the sounds come through regularly but with alternate intensity. In the regular heart when the sounds alternate, it means pulsus alternans, a sign of left ventricular weakness.

Petechiae.—We know petchiae are signs of subacute bacterial endocarditis. It is surprising how often they are overlooked. Just one petechia with a little gray center at the crevice of the eyelid is all you may need to make the diagnosis of subacute bacterial endocarditis. A petechia is not going to shout out, "I'm here; look for me." You must look for it. Some petechiae are overlooked because the eyelids are not examined in the proper way. In order to see the innermost fold or crevice of the conjunctival sac, it is best to pick up the lower lid between the thumb and index finger. Nowadays it is no academic question whether you make the diagnosis in January or in July. It may be a matter of life or death to the patient.

Clubbing of the fingers.—This is easy to detect if you look for it. It may help in the diagnosis of subacute bacterial endocarditis, congenital heart disease with cyanosis, chronic suppuration, a-v fistula of the lung, though it occurs in some other conditions.

The Heart Itself.—A forceful lifting apex impulse generally indicates left ventricular hypertrophy. Everything we can ascertain nowadays that aids in accurate anatomical diagnosis of the valvular diseases is important. We now need to know whether the patient has mitral stenosis and not aortic stenosis, or mitral stenosis with aortic stenosis, or mitral stenosis with tricuspid stenosis. The surgeon may not help the patient very much when he operates for mitral stenosis if aortic stenosis and tricuspid stenosis are also present.

One could discuss auscultation for hours. It has been a much neglected subject. Dr. Franklin Johnston has been impressed by this need, and he is trying hard to teach it, which is certainly not true in many places. Old-fashioned auscultation was thrown out of the window when electrocardiography came in. However, it is coming back now. It is a very important part of our examination. Nowadays it is all the more important. A lot can be learned from auscultation. You have to listen with intelligence and care. You cannot listen to a heart promiscuously. There are four things to

note—two sounds and two intervals. You must listen to one thing at a time. If you do not, you are going to miss important points. You must say to yourself, "I am going to listen to diastole," and forget everything else, so that when you get through you will not be able to tell whether a systolic murmur is there because you did not listen to systole. If you listen that intently, you will hear everything that is going on in diastole. Is there a third sound? Is there a rumble? Is there a presystolic murmur? These are vital findings now. Is the first sound accentuated? If the first sound is accentuated, you start thinking about thyrotoxicosis, mitral stenosis, and short P-R interval. We find what we look for, but you must have clues to guide you to look for the right things and these are some of the clues that will help you. You will listen all the more intently with the patient in the left lateral position to hear the diastolic or presystolic rumble which would otherwise escape your attention entirely. The diastolic gallop must be detected. It is an ominous sound. Systolic gallop is a benign sound. You must learn to distinguish the one from the other, and it can be done.

As far as the lungs are concerned, beware of making a diagnosis of heart failure when the signs of congestion are at the left base and the right base is clear. Look for some other cause—pulmonary infarction, pulmonary infection, pneumonia, bronchiectasis, or tumor. It does occur when the right pleura is bound by adhesion; in that case there may be a left-sided hydrothorax with the right base fairly clear. At least look for some other than a cardiac mechanism if the signs are at the left base and not at the right, because you expect cardiacs to have signs predominantly or solely on the right. This has helped me to think of cancer or other local causes such as bronchiectasis. I recall seeing a patient many years ago who was given a prognosis of six months. She had râles at the bases, hypertension, a heart murmur, puffiness of ankles and inversion of the T-wave in lead one. On close analysis, none of these features indicate heart failure. The hypertension, the inverted T-wave, and murmur did not. The puffiness in the ankles of a woman who had five children did not mean much, and the râles were on the left side. She died of heart failure about twenty years later at the age of eighty-four. She never had signs of heart failure until the last few years of her life. She had a little bronchiectasis at the left base and the râles stayed there all that time.

Râles need interpretation. They may have a different significance in one person than in another. Expiratory squeaks are generally bronchial in origin. Cardiac failure râles are moist inspiratory râles. Some patients with acute pulmonary edema, however, have both mechanisms. When the patient has râles all over the chest, front and back, and they are due to heart disease, that patient is desperately ill. If you hear many râles front and back in a cardiac or so-called cardiac, and the patient is not desperately sick, the râles are most likely due to bronchial emphysema or asthma rather than cardiac congestion. The prognosis and treatment is entirely different in the two.

As far as edema is concerned, patients who are staying in bed and resting a good deal may lose their edema of the ankles but it appears in the sacral region. We still too often hear the house doctor say the patient is getting better because the edema of the ankles is gone. When the patient is in bed we need to examine the lower back. The fluid may only have shifted upwards.

Get in the habit of feeling the femoral pulse. That should be a routine. If we develop habits early in life they become reflexes; then you do not need to worry about them. We reflexly feel a pulse at the wrist, but we must also reflexly feel the femoral pulse. In any person who has even a slightly elevated blood pressure, finding an absent or feeble femoral pulsation challenges you to look for coarctation of the aorta. We need to make that diagnosis now, not when patients are forty years of age and have marked sclerotic changes or when the aorta has become thin below the coarctation but as early as possible. We want to make the diagnosis early because it can be cured. It is a simple diagnosis to make. It is overlooked because someone has not examined the femoral pulsation. If anyone has an elevated pressure in the arms and you cannot feel adequate pulsations in the femoral arteries, that patient should be suspected as having coarctation of the aorta. Finding the blood pressure in the legs lower than in the arms and detecting changes in the lower margins of the ribs or alterations in the appearance of the aorta on x-ray examination may then clinch the diagnosis.

It is a reflection on the medical profession to realize that last year I saw two adults in short order, one a woman twenty-five years old and another thirty-seven years old, in whom diagnosis

(Continued on Page 50)

Treatment of the Nephrotic Syndrome

By Lloyd T. Iseri, M.D., Ivan J. Mader, M.D., and Douglas E. Chandler, M.D.

Detroit, Michigan

NUMEROUS new therapeutic measures have recently been introduced for the treatment of the nephrotic syndrome. The present paper attempts to evaluate these various measures. A patient with nephrotic syndrome is presented because of several forms of treatment he received.

Case 1.—R. E. (52,6486), a fifteen-year-old Negro boy, was first seen March 25, 1951, with a three-week history of progressive edema involving the face, hands, feet, scrotum, and abdomen. The past history was negative for hematuria or facial edema. Tonsillectomy had been performed in 1946 without sequelae. Examination showed a Negro boy with the typical nephrotic syndrome and anasarca. The blood pressure was 130 mm. Hg, systolic and 90 mm. Hg, diastolic. The blood hemoglobin was 13.5 gm., serum alubumin 1.54 gm., and serum globulin 2.86 gm., per 100 ml. The Kline test was negative. The corrected glomerular filtration rate was 115 ml. per minute, renal plasma flow, 580 ml. per minute, and maximal tubular excretion for para-amino-hippurate (TmPAH), 117 mg. per minute. Plasma sodium concentration was 140, potassium, 4.56, chloride 98.3, and carbon-dioxide combining power 26 mEq. per liter. The blood urea nitrogen was 11 mg. per 100 ml.

After numerous unsuccessful attempts to reduce the edema with dietary management, with two courses of melamine therapy and with one course of intravenous salt-poor albumin, a ten-day course of adrenocorticotropin (40 mg. per day) therapy was given. This resulted in partial evacuation of the edema. The patient was discharged July 6, 1951, with minimal edema, but was readmitted November 14, 1951, after anasarca had again developed. The serum albumin was now 0.8 gm. and globulin 2.3 gm. per 100 ml. The blood urea nitrogen was 13 mg. per 100 ml. and the plasma carbon-dioxide combining power 22 mEq. per liter.

Because of the extremely low serum albumin level, a six-day course of intravenous salt-poor albumin, 25 gm. per day, was given. This was followed by a twelve-day course of adrenocorticotropin, 48 mg. per day. With the albumin infusions, the body weight fell promptly from 47.57 to 43.62 kgm., but rose again to 48.4 kgm. during the first ten days of adrenocorticotropin therapy. During the last two days of adrenocorticotropin therapy, the weight fell to 45.27 kgm. and continued to fall, reaching a minimum of 42.44 kgm., three days later. Increased urine output and the disappearance of edema accompanied the weight changes.

In spite of a 200 mg. sodium diet and potassium citrate salts (6 gm. per day), the weight rapidly rose to 48.65 kgm. and edema returned.

Another course of adrenocorticotropin was then given, this time in conjunction with albumin therapy, in an effort to determine whether or not the increase in edema during the initial stages of adrenocorticotropin administration could be prevented by the simultaneous use of salt-poor albumin. As depicted in Figure 1, only the first infusion of salt-poor albumin was effective in decreasing the body weight. The second and third infusions, administered after the adrenocorticotropin had elicited a maximum influence on the adrenal cortex, were ineffective in preventing the accumulation of fluid. Although the decline in body weight did not occur until nine days after combined therapy had been instituted, the urine and sodium excretion had already begun to increase by the sixth day. The maximal excretion of urine and sodium occurred the day following cessation of adrenocorticotropin and totalled 5,450 ml. and 910 mEq., respectively. The serum proteins rose slightly just prior to the onset of diuresis, but a greater rise occurred after the diuresis had become maximal. The patient became free of edema.

Within the next two weeks, however, there was a gradual reaccumulation of edema fluid. Since it was obvious that a relative state of edema-free remission could not be attained and maintained by adrenocorticotropin therapy and a 200 mg. sodium diet, the efficacy of an ion-exchange resin was next evaluated. The results are shown in Figure 2.

The patient was first placed on a 1000 mg. sodium diet with no other specific forms of treatment. As can be seen in the illustration, there was a rapid increase in weight from 43.96 to 46.05 kgm. The ion-exchange resin* was then given in doses of 15 gm. three times a day. The rapid weight gain was prevented, but diuresis was not initiated and edema persisted. After reduction of dietary sodium to 500 mg. per day, the weight declined steadily from 46.75 to 43.55 kgm. and the edema was eliminated from the subcutaneous tissues. Omission of ion-exchange resin for one day resulted in a transient gain of 0.40 kgm. of body weight. During the initial five-day period of ion-exchange resin therapy, the plasma carbon-dioxide combining power fell from 19.2 to 11.4 mEq. per liter and the plasma chloride rose from 101 to 107 mEq. per liter, indicating a tendency toward hyperchloremic acidosis, a complication of ion-exchange resin therapy. Readjustment of electrolyte balance, including a rise in the low plasma sodium level, took place even though the resin treatment was continued. As has been noted often by others, the evacuation of edema occurred with no significant change in the serum protein concentrations. The patient was discharged February 18, 1952, on a 500 mg. Na diet and 45 grams of ion-exchange resins per day. He remained in a relative state of re-

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*Carbo-Resin, supplied in generous quantities by Dr. B. L. Martz, Eli Lilly and Co., Indianapolis, Ind.

mission until May 14, 1952, at which time he was readmitted with generalized anasarca.

The patient had contracted an upper respiratory infection and had subsequently become intolerant to the ion-

mg. per 100 ml.; and the plasma carbon-dioxide combining power, 16 mEq. per liter. The white blood cell count was 18,500 per cu. mm. and the hemoglobin concentration, 9.2 gm. per 100 ml. Urinalysis showed 4 plus

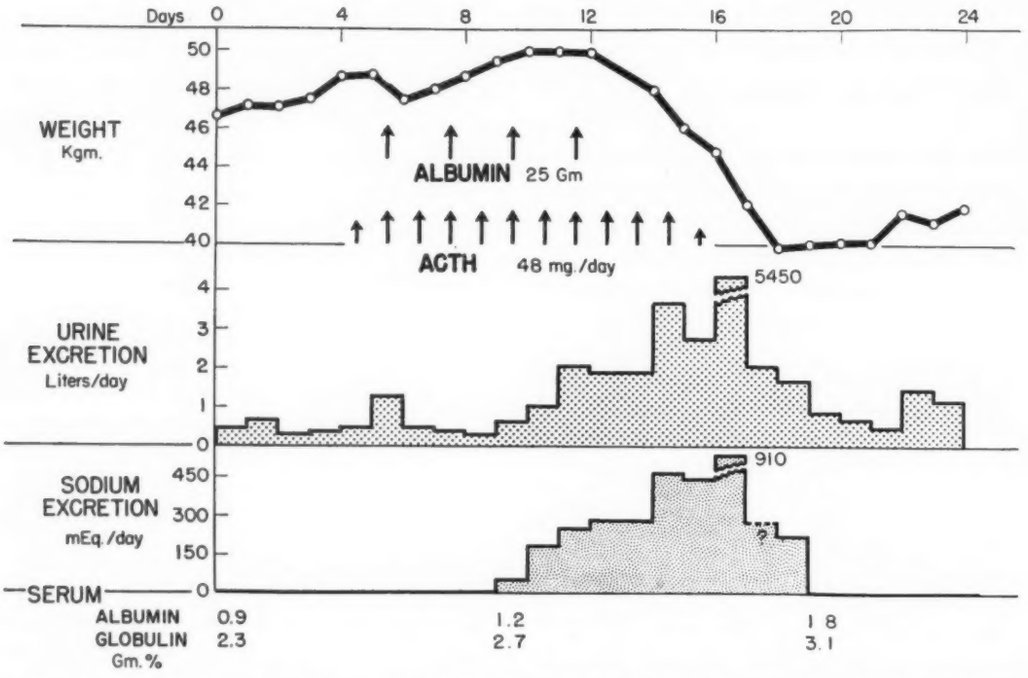

Fig. 1. (R. E., 14 yrs.) Effect of combined albumin and ACTH therapy in nephrotic syndrome.

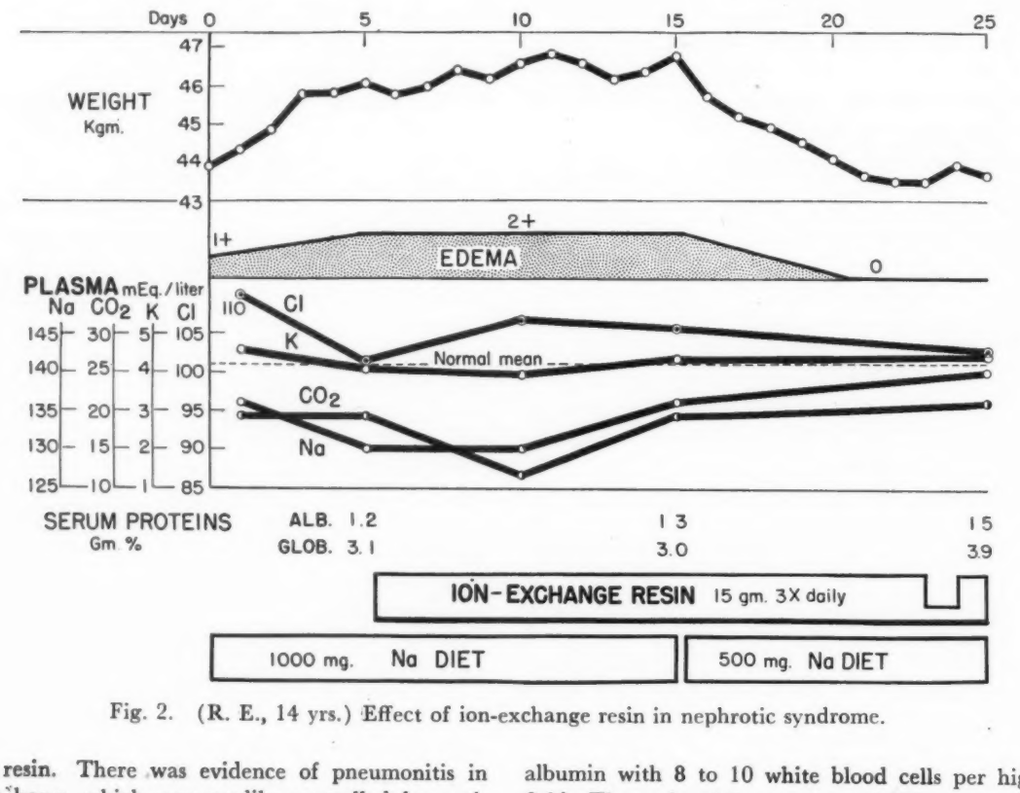

Fig. 2. (R. E., 14 yrs.) Effect of ion-exchange resin in nephrotic syndrome.

exchange resin. There was evidence of pneumonitis in both lung bases, which was readily controlled by antibiotics. The serum albumin was 1.0 gm.; globulin, 2.5 gm.; serum cholesterol, 720 mg.; blood urea nitrogen, 29

albumin with 8 to 10 white blood cells per high power field. The eosinophile count was 2,597 per cu. mm.

The patient received a short course of salt-poor albumin therapy with no effect. This was followed by a

ten-day course of adrenocorticotropin therapy. There was a weight gain from 52.45 to 54.46 kgm. during the first five days. The weight then remained stationary for the remaining five days of therapy and for four days after lowered to 120/90 mm. Hg but the weight continued to increase to 56.90 kgm. In addition, the patient had a mild episode of thrombophlebitis and also developed typical striae on the thigh, one of which became in-

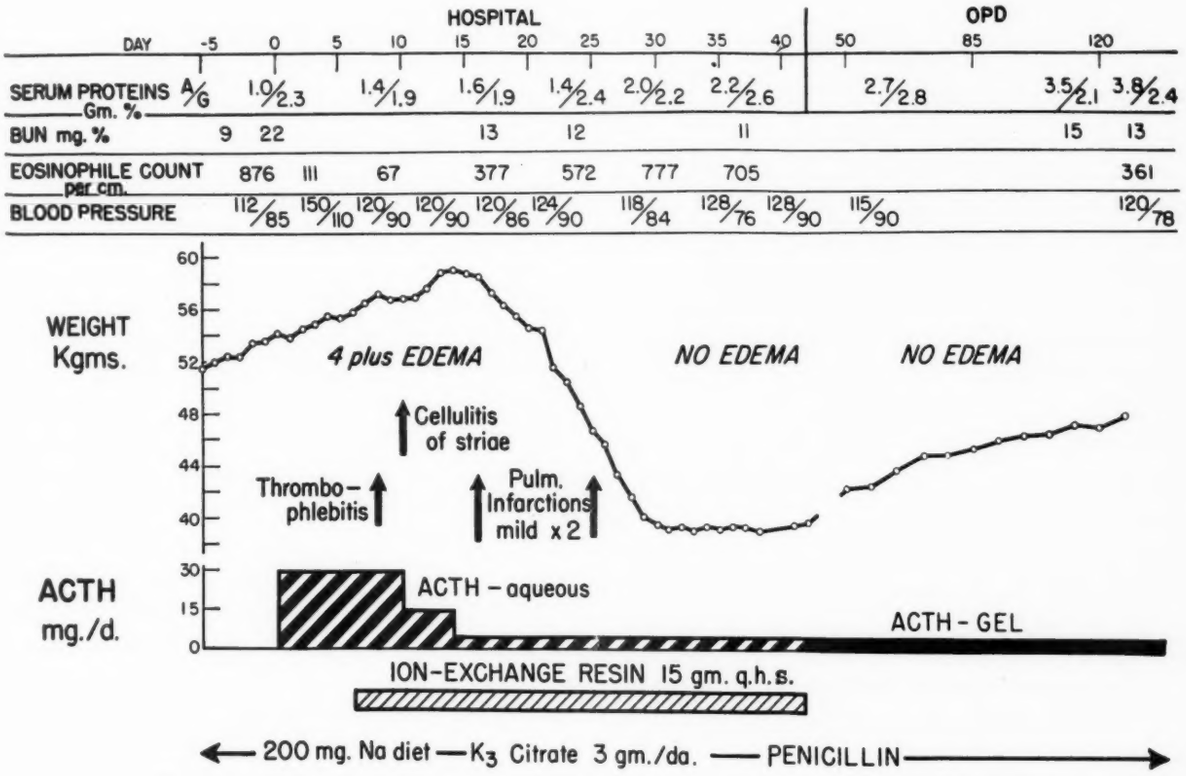
HOSPITAL
OPD
DAY -5 0 5 10 15 20 25 30 35 40 50 85 120
SERUM PROTEINS Gm. % A/G 1.0/2.3 1.4/1.9 1.6/1.9 1.4/2.4 2.0/2.2 2.2/2.6 2.7/2.8 3.5/2.1 3.8/2.4
BUN mg. % 9 22 13 12 11 15 13
EOSINOPHILE COUNT per cm. 876 111 67 377 572 777 705 361
BLOOD PRESSURE 112/85 150/110 120/90 120/90 120/86 124/90 118/84 128/76 128/90 115/90 120/78
WEIGHT Kgms.
60
56
52
48
44
40
4 plus EDEMA
NO EDEMA
NO EDEMA
Cellulitis of striae
Thrombo-phlebitis
Pulm. Infarctions mild x 2
ACTH mg./d.
30
15
0
ACTH - aqueous
ACTH - GEL
ION-EXCHANGE RESIN 15 gm. q.h.s.
200 mg. Na diet — K3 Citrate 3 gm./da. — PENICILLIN

Fig. 3. (R. E., 15 yrs.) Treatment of nephrosis with adrenocorticotropic hormone.

cessation of therapy. The reason for the failure of ACTH withdrawal to induce diuresis was, no doubt, the result of a superimposed cellulitis of the thigh, which had occurred immediately after discontinuance of adrenocorticotropin. With control of the infection by large doses of penicillin, there occurred a delayed but rapid diuresis with a fall in weight from 54.60 to 50.4 kgm. A considerable amount of edema still remained, however. Gradually, the fluid reaccumulated, even on a 200 mg. sodium diet, and the patient's weight again rose to 54.15 kgm.

It was then decided to investigate the effect of prolonged ACTH therapy on the elimination of edema and on the maintenance of a relative state of remission. The results of this study are shown in Figure 3.

After a control period of observation, when a progressive increase in weight and a normal blood pressure were observed, adrenocorticotropin injections of 30 mg. per day were started. Within five days the blood pressure rose to 150/110 mm. Hg and the weight increased from 54.15 to 55.20 kgm. The patient was mildly euphoric by this time. A good eosinophile response to ACTH was obtained, the count falling from 816 to 111 per cu. mm. The adrenocorticotropin was continued at 30 mg. per day for another five days and 15 gm. of ion-exchange resin at bedtime was added to the regimen of a 200 mg. sodium diet (with 90 gm. of protein) and 3 gm. of potassium citrate per day. The blood pressure was fected. These complications subsided with an increase in penicillin therapy and with reduction of ACTH to 15 mg. per day. The weight, however, continued to increase and reached a peak of 59.10 kgm. four days later. By this time the patient was tremendously edematous. He then suffered a mild pulmonary infarction with a rise in temperature, pulse, and respiratory rate. The infarction was confirmed radiologically. The adrenocorticotropin was reduced to 5 mg. per day and this dosage was maintained for the remaining twenty-eight days in the hospital. Two days after reduction in dose of ACTH, a diuresis took place and the weight began to fall sharply, so that in sixteen days it had fallen from 58.60 to 39.10 kgm. The edema was completely eliminated. The eosinophile count, which had fallen to 67 per cmm. on the ninth day of therapy, rose to 377 at the onset of diuresis, to 572 at the height of diuresis, and to 777 at the end of diuresis. The serum proteins increased slightly before the onset of diuresis and continued to increase afterwards.

In spite of a persistent proteinuria of 19 gm. per day, the patient maintained an edema-free state and was discharged to the out-patient clinic with maintenance injections of 2 units of adrenocorticotropin in gelatin daily, in addition to a 200 mg. sodium, 90 gm. protein diet, 2 gm. of potassium citrate daily, and 400,000 units of oral penicillin twice daily. During the four-month follow-up

to date, there has been a gradual increase in weight, reflecting a gain in body tissue. Edema has not recurred. The total serum proteins have shown a progressive rise from 3.3 gm. per 100 ml. at the beginning to 6.2 gm. at the end of the study. More significantly, the albumin concentration has risen from 1.0 to 3.8 gm. per 100 ml.

Discussion

A discussion of the treatment of nephrosis involves the recognition and consideration of four main objectives. These are: (1) elimination of edema; (2) maintenance of a relative state of remission and maintenance of an optimal state of nutrition; (3) control and prevention of infection; and (4) the possibility of reversion or suppression of the progressive underlying pathological dysfunction.

1. *Elimination of Edema*

Mechanical Measures.—Edema may be eliminated by several methods. First of all, mechanical means by which fluid can be removed include procedures such as abdominal paracentesis, thoracentesis, and Southey-Leech tube drainage. In general, these measures are usually reserved for patients in whom the accumulated fluid interferes with circulatory or respiratory functions. The danger of introducing infection, the loss of proteins, albeit not too great, and the ineffectiveness in eliminating edema from the body as a whole limit the use of these mechanical measures.

Diet Therapy.—Dietotherapy provides a more practical, but oftentimes a more protracted, method of reducing edema. Limitation of sodium in the diet to 800 or 400 or at times to 200 mg. per day successfully eliminates edema in most mild to moderate cases of nephrosis. Peculiarly, however, in many cases a step-like reduction in the sodium intake often results in a similar reduction of sodium excretion without an appreciable reduction in body weight. The use of sodium-free milk makes possible an adequate intake of protein without excess of sodium, but the relative unpalatability of these products often interferes with their acceptability. Much of this difficulty can be overcome by proper preparation of the milk. It should not be "chalky" and is usually better tolerated when served cold and flavored with sugar and vanilla.

Ion-exchange Resins.—Ion-exchange resins may be employed as adjuncts to the dietary management of nephrosis. Fifteen grams of resin, given three or four times a day, can effectively produce evacuation of the edema.[5,8] It is usually necessary to limit sodium ingestion to a certain extent for the resins to be effective, since their capacity to exchange ammonium and potassium ions for dietary sodium is only about 0.5 mEq. per gram of resin. This can be illustrated well in the case reported here (Fig. 2). Forty-five grams of the ion-exchange resin was ineffective when a 1000 mg. sodium diet was given, but was decidedly effective when a 500 mg. sodium diet was substituted. Hyperchloremic acidosis may complicate the use of these resins even though anion-exchange resins are included in the preparation. Hyponatremia and hypokalemia may also supervene occasionally. Care must be doubly exercised in patients with renal insufficiency.

Alkaline Sodium Salts.—Although alkaline sodium salts have been reported to effect a diuresis in nephrotic patients,[7] this has not been a constant finding[9] and the severe progressive exaggeration of edema, which this form of therapy imposes before diuresis can be expected, appears to be a formidable objection, even for a therapeutic trial.

Nitrogen Mustards.—Another recent innovation in the treatment of nephrosis is the use of nitrogen mustards.[4,18] Diuresis, if it does occur, begins early in the course of treatment, but the response is quite inconstant and more than one course may be necessary. The exact mode of action is not known, although interference of the antigen-antibody reaction has been suspected. Proteinuria seems to decrease in severity. Although specific renal function studies in patients with normal function (Hodgkin's disease and cases of leukemia) show no change with melamine, an analogue of nitrogen mustard,[16] it is possible that in nephrotic patients, with abnormal renal functions, the kidney may be adversely affected, diuresis occurring because of renal damage. In one case of nephrosis treated successfully by us with a total of 10 mg. of melamine, the glomerular filtration rate fell from 90.7 to 58.0 ml. per min. and the maximal tubular excretion for para-amino-hippurate fell from 47 to 24 mg. per minute. Renal plasma flow remained constant at 865 to 890 ml. per minute.[16] Toxicity from nitrogen mustards is often quite serious and thus the routine use of these drugs cannot be recommended at the present time. In the case reported here the patient received two separate courses of melamine therapy with no diuresis.

Salt-poor Albumin.—The development of salt-poor albumin made possible a selective replacement of the primary substance which is deficient in the nephrotic patient.[10,19] Approximately sixty per cent of cases will diurese with a course of salt-poor albumin. Twenty-five to fifty grams of this substance in either a 10 or 25 per cent solution is infused slowly once a day for four days. It is well to remember that if the first two infusions fail to induce a diuresis, the third and fourth infusions should be withheld. The mechanism of diuresis is undoubtedly related to the increase in circulating plasma proteins with or without an increase in glomerular filtration rate, but with decreased tubular reabsorption of sodium.[13,15] The albumin that is infused is apparently not retained or utilized to any significant degree. Most of the injected albumin is lost in the urine and whatever remains in the body is rapidly decomposed and excreted as an added increment of non-protein nitrogen. The relative unavailability of salt-poor albumin and the prohibitive cost of commercially prepared products, together with the extremely transient effect it produces, are all factors which dampen the enthusiasm originally elicited by this form of treatment. Nonetheless, salt-poor albumin, when effective, produces a diuresis almost immediately after the first infusion, so that it is an ideal therapeutic agent with which to prepare nephrotic patients for surgery or to treat nephrotic patients during a serious acute infection. Salt-poor albumin can also be used to minimize the dangers of a subsequent course of adrenocorticotropin therapy. On the other hand, the simultaneous use of salt-poor albumin with adrenocorticotropin therapy, as was tried in the present case (Fig. 1), did not prevent the gain in weight due to the ACTH, although it is to be noted that diuresis was initiated quite early in the course of the treatment.

Measles.—Deliberate induction of measles to nephrotic patients is not without danger and therefore cannot be recommended.

Adrenocorticotropin and Cortisone.—The most consistent agent thus far found, which will induce diuresis in nephrotic patients, appears to be the adrenocorticotropic hormone.[12,17,20] Approximately 82 per cent of all nephrotic children will respond to the first course of treatment. A second course will be successful in an additional 9 per cent of cases[17] The hormone can be injected in divided doses, totaling 40 to 60 mg. per day, for eight to twelve days, after which the injections may be discontinued abruptly or rapidly decreased to a maintenance dose, as described below. Diuresis and a rapid fall in weight may occur while the injections are still being given or the desired effects may occur only after the adrenocorticotropin has been stopped or reduced to subeffective doses.

During the initial four to five days of adrenocorticotropin therapy, the nephrotic state is usually made worse, with an increase in proteinuria, edema and body weight and a rise in the blood non-protein nitrogen level. After about six to ten days of treatment, however, the patient will show a decrease in proteinuria, a slight rise in serum albumin concentration and, in one-half of the patients, a rapid onset of diuresis and a fall in weight. The other half will diurese only after ACTH is withdrawn. A superimposed infection will delay the onset of diuresis until the inflammatory process is controlled by specific antibiotic treatment. The eosinophile count should fall within forty-eight hours as an index of the physiological effect of adrenocorticotropin, but the fluctuations of the eosinophile count do not serve as an index of therapeutic efficacy.[17] The onset of diuresis appears to be related to an increase in glomerular filtration rate, an increase in plasma volume, and a decrease in urinary salt-retaining corticoids.[3,12]

The complications which accompany adrenocorticotropin therapy should be anticipated, and preventive measures taken. The latter include a low sodium, high potassium intake and antibiotic therapy.

The case reported here illustrates most of the features and complications of adrenocorticotropin therapy of nephrosis.

Cortisone has also been used to induce diuresis in nephrotic patients,[11] but apparently the frequency with which this can be accomplished is not too great.[17]

2. *Maintenance of the Relative State of Remission and the Optimal State of Nutrition*

Once diuresis is effected, the problem then becomes one of "holding the line," so to speak, keeping the edema at a minimum, and at the same time maintaining an optimal state of nutrition. A low-salt diet with the sodium content regulated between 200 and 800 mg. per day is usually required. For diets limiting the sodium to less than 400 mg. per day, special salt-free bread, salt-free butter, and

salt-free milk (Lonolac) are usually essential. Occasionally when renal insufficiency is significant the radical restriction of sodium may actually be deleterious, so that the more liberal intake of sodium, which is required, may, by necessity, cause a certain amount of edema.

Ion-exchange resins may also be used over a prolonged period of time to maintain a relative state of remission. As mentioned before, even with this form of treatment a certain amount of sodium restriction must be exercised.

For reasons not yet clear, alkaline potassium salts seem to increase the tolerance for sodium by nephrotic patients. These salts can be given as a 25 per cent potassium citrate solution in syrup, 4 to 8 ml., three times a day. It must be emphasized that potassium salts are potentially dangerous, and caution must be exercised in patients who are severely oliguric or azotemic. Direct chemical or flame photometric analysis of the plasma for potassium or an electrocardiographic study for hyperpotassemia should be made at least once during and once after the first week of therapy to determine the relative tolerance for this drug.

The maintenance of an optimal state of nutrition is also important in the treatment of nephrosis. Forcing an intake of protein over the actual metabolic needs seems hardly necessary and may even be harmful to the patient.[1] For this reason, it is important to determine from time to time the actual quantity of protein lost daily in the urine and to give additional protein in the amount of 0.75 to 1.0 gm. per kgm. of optimal body weight. A growing child should receive from 1.0 to 2.0 gm. of protein per kgm. body weight in excess of the quantity lost in the urine. Gain in weight (without increase in edema) should be obtained in a growing child. Some improvement in the serum proteins can usually be observed, but attempts to restore the concentration to normal values will often be met with failure. An adult patient can usually maintain nutrition with about 0.75 gm. of protein per kgm. body weight over and above that lost in the urine. Most of the proteins can be supplied as salt-free milk (Lonolac). Carbohydrate intake must be kept high because of its protein-sparing action. Three hundred grams per day are usually sufficient.

3. *Control and Prevention of Infection*

Nephrotic patients are extremely susceptible to infection and often a minor infection progresses rapidly to a fulminating fatal outcome. Furthermore, exacerbations of nephrotic edema often occur following an infection. For these reasons, we recommend the prophylactic ingestion of oral penicillin tablets, 200,000 to 400,000 units, two times a day. Parenteral penicillin or other antibiotics, as indicated, should be given without hesitation if an infection supervenes during a remission of nephrosis, in spite of prophylactic oral penicillin. We have also been impressed with the frequency of urinary tract infections in nephrotic patients, and active specific antibiotic treatment should be given for these complications. We feel, on the other hand, that the sulfonamides should not be given to patients with nephrosis.

The case reported here had at least one infection directly responsible for an exacerbation of symptoms.

4. *Possibility of Reversion or Suppression of the Underlying Pathological Process*

Since the exact etiology of the underlying disease process responsible for the nephrotic syndrome, whether it be glomerulonephritis, "lipoid" nephrosis, or lupus erythematosus, is not known, it is not to be expected that any of the known therapeutic agents now available will heal or even suppress the pathological process seen in the kidney. However, since spontaneous cures do occur[2] and since noticeable improvement in specific renal function tests is seen during adrenocorticotropin therapy,[3,14] it is not unreasonable to hope for the possibility of a permanent improvement. The prolonged low-dose maintenance therapy with adrenocorticotropin holds the most promise for fulfillment of this possibility. Even if the sole purpose of the adrenocorticotropin is to keep the inflammatory reaction in abeyance,[6] this form of therapy is certainly worth the trial. The suppression of the nephrotic symptoms in the patient reported here, after one and one-half years of frustrating recurrences, and the gradual improvement in the nutrition of the patient, with a steady rise in plasma protein concentrations to normal during the last four months of continuous adrenocorticotropin and penicillin therapy, attest to the possible value of this form of management.

Summary

A typical case of nephrosis in a fifteen-year-old boy treated with various forms of therapy is pre-

sented. Relative merits and demerits of these forms of therapy are discussed in relation to the four objectives of treatment: (1) elimination of edema, (2) maintenance of remission and nutrition, (3) control and prevention of infection, and (4) possible reversion and suppression of the underlying pathological disorder.

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ARMY SURGEON GENERAL REPORTS 85 PER CENT KOREA WOUNDED RETURNED TO DUTY

At least 85 per cent of U. S. troops wounded in Korea are being returned to active duty within an average of three months, according to Maj. Gen. George E. Armstrong, Army Surgeon General. He made a report at a special press conference in the Pentagon Building, called to correct what he said was the public impression that Korean casualties represented "a complete loss to the United States."

Gen. Armstrong placed total U. S. casualties in the neighborhood of 100,000 including 16,500 killed in action, 12,000 missing and 71,500 wounded. In the latter category, he said 62,500 have returned to duty, 4,500 are remaining in Army hospitals, 3,000 have been discharged for disability and 1,500 have died of wounds.

He said the rate of death of the wounded was 2.4 per cent, the lowest in any war, and he attributed this to fast evacuation from the front lines and early surgery. Gen. Armstrong had high praise for newly developed body armor.

Simultaneous with the Surgeon General's report, the Defense Department asked Selective Service to deliver 544 physicians for the armed services in January. The Army has asked for 344 and the Air Force for 200. The Department said that since July, 1951, the total physicians called to duty under the Doctor-Draft Law is 3,238.

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The Surgical Treatment of Mitral Stenosis

By Conrad R. Lam, M.D.
Detroit, Michigan

SINCE March 31, 1950, forty-seven patients have been accepted for surgical treatment of the mitral valve. It was planned to correct the stenosis by the method of Bailey and his associates[1] which is commonly referred to as "commissurotomy." This involves inspection of the valve by palpation with the forefinger passed into the left auricle through the appendage and an attempt to widen the orifice by cutting with an appropriate instrument at the angles or commissures without sacrifice of valve leaflet structure, thus avoiding the production or augmentation of regurgitation. Experience has shown that it is possible to split apart some of the valve cusps by manipulation with the finger alone. This method has been advocated by Harken[3] and by Brock.[2] It is of interest that a successful "finger fracture" by a method identical with that in use today was reported by Souttar[8] of Great Britain in 1925. It is difficult to explain why this brilliant lead was not pursued further immediately. Instead, for almost twenty-five years, surgeons tried to relieve mitral stenosis by cutting out pieces of valve leaflets with valvulotomes inserted through the left ventricle. Naturally, these operations were almost universally unsuccessful because of the regurgitation produced.

In a previous communication,[4] I reported the results of the first nineteen patients operated on in the Henry Ford Hospital. There were five postoperative deaths, three of which were clearly due to errors in diagnosis since the lesions in the valves were predominantly regurgitation rather than stenosis. The other two deaths were due at least in part to technical errors. During the operation on one of these patients, the ratchet broke off the guillotine making it impossible to divide the commissures satisfactorily. In the other patient, finger fracture of the medial commissure was complicated by a tear across the base of the posterior leaflet. Both of these patients had advanced pulmonary fibrosis as a result of long standing pulmonary hypertension.

There have been only two hospital deaths in the last twenty-eight patients. In one of these patients, there was a gross error in case selection, the lesion being that of endocardial fibroelastosis[7] with incompetence of the mitral valve rather than stenosis. In the other patient, a ventricular wound was made with the knife during an attempt to cut the medial commissure, and following suture of this, the heart could not be resuscitated.

Thus, there have been seven operative deaths in the series of forty-seven patients. To this must be added three deaths in patients who were discharged from the hospital. One patient with a good technical commissurotomy showed evidence of brain damage after the operation. This was probably due to embolism but could also have been the result of a prolonged period of hypotension occurring after moderate blood loss. As a result of this experience, certain modifications have been made in the operative technique to improve the hemostasis. Another patient with marked preoperative regurgitation was temporarily improved but expired six months later. A patient with pure mitral stenosis died two months after a supposedly successful finger fracture; autopsy showed that the stenosis had recurred and that there was evidence of fresh inflammation in the valve. It is believed that a more radical commissurotomy with the knife would have yielded a better result. Of the thirty-seven living patients, two are unimproved; the others are considered to have good or excellent results.

The ages of the patients accepted for commissurotomy fell itno the following groups: twenty to twenty-nine years, ten cases; thirty to thirty-nine years, eighteen cases; forty to forty-nine years, eighteen cases; over fifty years, one patient (aged fifty-three). There were thirty-five females and twelve males. Only twenty patients gave a definite history of rheumatic fever. All had many of the disabling symptoms of mitral heart disease, including shortness of breath, orthopnea and marked decrease in the ability to do work. Thirty-five had had attacks of pulmonary edema, and in twenty-two of these, there had also been hemoptysis. Twenty-three patients showed auricular fibrillation at the time of operation. All had a more or less typical diastolic rumble at the apex. Fourteen had a systolic murmur at the apex of grade two or better, and in five of these, serious regurgitation

From the Division of General Surgery at the Henry Ford Hospital, Detroit.

Read at the Michigan Clinical Institute, Detroit, March 14, 1952.

was encountered. Fluoroscopic examination in most instances showed a picture typical of mitral stenosis, with enlargement of the pulmonary conus, left auricle and right ventricle. Three of the deaths occurred among five patients with evidence of hypertrophy of the left ventricle. In many of the patients the pulmonary artery pressure was determined by cardiac catheterization; the mean pressures varied from 40 to 124 cm. of water.

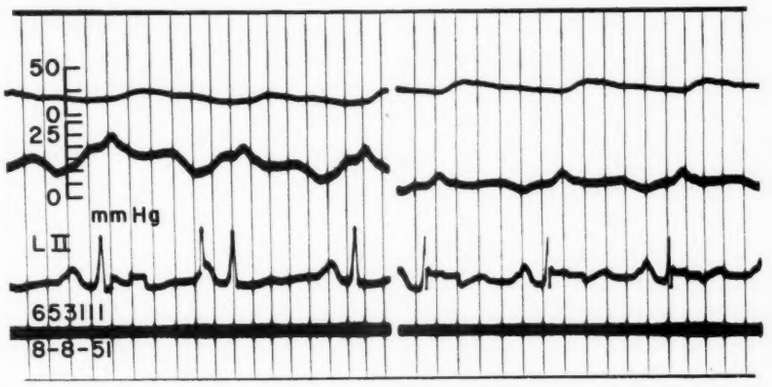

Fig. 1. Oscillograph tracings (Hathaway apparatus) made during operation for mitral stenosis. Record on left is before the commissurotomy, that on the right is after. The upper tracings are from the pulmonary artery, the middle, from the left auricle, and the lower, from Lead 2 of the electrocardiogram. The pulmonary artery pressure was not high at the beginning and did not change, but there was a significant fall in left auricular pressure.

The presence of important mitral regurgitation has been the commonest contraindication to operation. This has been recognized by the finding of an apical systolic murmur transmitted well into the axilla, marked enlargement of the left auricle and left ventricular hypertrophy. Except in one instance, the presence of aortic valve disease has been considered a contraindication. The exception was a case of mild aortic stenosis, who was improved by commissurotomy for mitral stenosis of severe grade. No patient who exhibited marked heaving of the precordium has survived the operation. Apparently this sign is indicative of left ventricular hypertrophy and valvular pathology other than mitral stenosis. The electrocardiographic findings have also been valuable in indicating the side and degree of ventricular hypertrophy.

In the first thirty-eight operations, the pulse patterns of the left auricle and pulmonary artery before and after the incisions into the stenotic valves were studied. An impedance gauging system developed for recording biologic pressure variables (Hathaway system) was used to obtain the pressure tracings. A detailed study of the oscillograph tracings of twelve patients has been published by Dr. Edward R. Munnell (Fellow of the Michigan Heart Association) and me.[6] We have been able to demonstrate a wave form which is typical of pure mitral stenosis, and after a satisfactory commissurotomy, this wave form is changed to one approximating the normal. An example of the records obtained during a successful operation is shown in Figure 1. In other records, the presence of important regurgitation has been indicated by an increase in auricular pressure synchronous with ventricular systole.

Fig. 2. Six-fingered glove to prevent hemorrhage during commissurotomy. The glove was designed and made by Dr. Edward R. Munnell.

The operative technique has been essentially that described by Bailey and his associates. I have continued to use an anterior approach through the bed of the resected third rib, with transection of

the second and fourth costal cartilages. In the last twenty cases, I have used a modified rubber glove with six fingers to prevent hemorrhage when a guillotine is inserted into the auricle with the forefinger (Fig. 2). This was constructed at the suggestion of Dr. Munnell.[5] The added finger, which is attached in the region of the thenar eminence, serves as a tunnel through which the knife can be inserted and to the end of which a tight ligature can be applied. Advancement of the instrument through the glove results in effortless telescoping of the finger. During the actual commissurotomy, this outer glove becomes distended with blood but none escapes.

The methods of opening the valves in the forty-seven patients have been as follows. In fifteen, the principal cut was in the lateral commissure, in eleven it was medially placed, and in five, incisions were made into both commissures. The finger alone was used in sixteen patients, or approximately one-third of the series. After seeing the valve of one patient at postmortem examination, after a supposedly successful finger fracture, and after observing several patients who are only slightly improved after the same procedure, I have come to the conclusion that more definite relief of the stenosis by instrumental incision is indicated even though there is more risk of producing some degree of regurgitation.

Summary

The results of forty-seven operations on patients with mitral valve disease have been presented. With the present technical state of the operation, a mortality of less than 10 per cent is to be expected. Proper case selection is an important factor in keeping the mortality rate low. Serious mitral regurgitation is the commonest contraindication.

Addendum

Since this report was presented, thirty-five additional patients have had the operation of mitral commissurotomy, with two postoperative deaths.

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DIAGNOSIS OF HEART DISEASE

(Continued from Page 40)

of patent ductus was made for the first time in my office. They had been seen by many physicians. That they should live twenty-five years and thirty-seven years, respectively, before a diagnosis of patent ductus was made is almost unbelievable. The murmurs were there; they had been there since these people were born, but still somebody did not listen carefully enough to hear the diastolic component. They probably heard the basal systolic murmur, but if they had been a little more careful in their auscultation, especially listening during a held expiration, they could have heard a continuous murmur. The diastolic component was not very loud, but it was there. The second one of these two had subacute bacterial endocarditis, too. They were both operated on and were cured.

You can see from this somewhat rambling talk that there is a great deal that we can pick up by the use of our senses and the stethoscope and the simple tools we all carry with us that can solve most of the diagnostic problems of heart disease. There will remain a group that you cannot solve, that nobody can without more elaborate study. They will have to be hospitalized. They are the ones who will require catheterization studies at times, electrocardiograms, measurements of circulatory dynamics, x-rays, et cetera. The rare case of pericardial constriction or the puzzling case of congenital heart disease will then be discovered. Although there remains, therefore, a residue that will need hospital studies, the great majority of these cases, I am sure, can be solved in our offices or in the patient's home if we apply the simple clinical methods that are available to all of us.

270 Commonwealth Avenue

Current Treatment of Rheumatic Fever

By Manes S. Hecht, M.D., Anthony Nolke, M.D., and Warren E. Shelden, M.D.

Detroit, Michigan

THE TREATMENT of rheumatic fever, largely empirical in origin, has some rationality when related to the concept of the disease which can be briefly stated as follows:

Rheumatic fever may be regarded as a disease of tissue hypersensitivity, brought on by beta hemolytic streptococcic infections in susceptible individuals. Hereditary factors may play a part in susceptibility to rheumatic fever. The tissue reactions which occur in active phases of the disease apparently serve no useful purpose, but on the contrary are harmful. Affected persons exhibit definite but variable tendencies to recover, and decreasing susceptibility to recurrence with the passage of years.

Based on this concept of the disease, therapeutic measures fall into three groups.

1. Supportive measures
2. Anti-streptoccic measures
3. Suppressive measures

So far as we know, none of our therapeutic agents alter the inherent susceptibility of the individual to react to streptococcic infections by developing rheumatic fever. It may therefore be said that we have no true cure for the disease.

The supportive measures are numerous and varied. Among them are included treatment of cardiac failure, bed rest during active phases of the disease, regulation of the convalescent period, and maintenance of the patient's education, training, and morale so that he will be able to lead a useful life within the limitations set by his disabilities.

Anti-streptococcic measures consist of early vigorous treatment of recognized or suspected streptococcic infection, eradication of streptocci present at the time of an attack of rheumatic fever, and prophylaxis against streptococcic infection. The latter ideally should include correction of unhygienic living conditions and deficient diet as well as drug prophylaxis. Drug prophylaxis, using sulfadiazine 0.5 gm. twice daily or penicillin 100,000 units three times daily is recommended only for known rheumatics. Attempts to actively immunize by means of streptococcus vaccine or Dick Toxin are of no value in preventing rheumatic fever.

By suppressive measures is meant the use of drugs of hormones to suppress the unwanted tissue reactions which occur during the active stage of rheumatic fever. The salicylates as well as cortisone and corticotropin seem to act in this way.

There has been much controversy over the merits of salicylate therapy in rheumatic fever. At the Children's Hospital of Michigan it has been our opinion that salicylates are of definite value in active rheumatic fever, but they are obviously much weaker anti-rheumatic agents than cortisone or corticotropin, and they are not without toxicity in optimal dosage. When we elect salicylate therapy we usually administer aspirin, gr. ¾ per pound per day, sometimes gr. 1 per pound per day if that much is tolerated by the patient. Salicylate intoxication is not uncommon at the latter dosage level. Close observation of the patient and determination of salicylate blood levels are imperative if dangerous reactions are to be avoided.

Hench of the Mayo Clinic first reported the use of cortisone and corticotropin in the treatment of rheumatic fever in 1949.[3] Since then there have been a number of excellent reports.[4,6] That the hormones are useful anti-rheumatic agents would seem to be obvious. Details as to when and how best to employ them are not yet established. A final evaluation of their impact on the overall picture of rheumatic fever will require years of observation.

At Children's Hospital of Michigan we first used the hormones in treatment of rheumatic fever in April, 1950. At first we were very conservative, treating only a few critically ill children who had not responded to conventional therapy. The results were such that we soon began to use cortisone or corticotropin in severe cases without delay, using aspirin first in less severe cases. More recently we have treated with hormones almost all patients with demonstrably active carditis, unless there has been some contraindication such as tuberculosis or other concurrent infection.

Based on a talk by Manes S. Hecht, M.D., on the 3rd Annual Michigan Heart Day, at Postgraduate Clinical Institute, March 14, 1952.

This study was aided by a grant from the Michigan Heart Association.

A substantial portion of the Cortisone used was contributed by Merck & Co. Inc.

The following is an analysis of those hormone-treated cases of rheumatic fever, forty-four in number, in which we have a follow-up of at least six months. During the period covered, approximately half of the patients diagnosed as having active rheumatic fever were treated with cortisone or corticotropin. No analysis of the cases not receiving hormone will be made here, except to state that those patients in whom no active carditis could be demonstrated at the time of admission all made excellent recoveries on salicylate therapy.

TABLE I.

White Male	13
White Female	17
Colored Male	4
Colored Female	10
TOTAL CASES	44
Age	
3 years	2
4 years	3
5 years	3
6 years	4
7 years	7
8 years	6
9 years	6
10 years	3
11 years	9
12 years	1

TABLE II.

First Attack	30
Second Attack	10
Third Attack (or more)	4

TABLE III. ESTIMATED DURATION OF ATTACK BEFORE TREATMENT

1 Week or less	9
1-2 Weeks	11
2 Weeks to 1 Month	9
1 to 2 Months	9
More than 2 Months	3
Unknown	3

Most of these patients were in their first attack. It is probable that some have had earlier attacks of which we would obtain no history. There was considerable variation in the duration of attacks before treatment.

TABLE IV. CARDIAC STATUS

Decompensated	15
Cardiac Enlargement	21
Valve Lesions	37
EKG Abnormalities	38
Pericarditis	4
TOTAL CASES	44

Approximately one third of these patients were in cardiac failure when treatment was instituted. Almost half had enlarged hearts as measured by teleroentgenogram. Thirty-seven of the forty-four had physical signs indicating valvular lesions, mostly of the mitral valve. Thirty-five had electrocardiographic abnormalities elicited by serial electrocardiograms. All had markedly accelerated erythrocyte sedimentation rates, four had acute pericarditis, two had subcutaneous nodules.

Treatment

Because of the great variability of attacks of rheumatic fever we did not set a definite course of treatment for all patients but have tried to adjust dosage and duration of therapy to individual needs. Some early cases received suboptimal dosage. We now start with 300 mg. of cortisone or 100 units of corticotropin for the first twenty-four hours in most cases, reducing the amount step-wise to a maintenance dose which is usually 100 mg. of cortisone or 40 units of corticotropin. The speed with which the dosage is reduced varies according to the severity of the attack and the response of the patient. Ordinarily it takes two weeks to reach maintenance levels. The daily dose of either hormone is divided into four parts given at six-hour intervals. We now use cortisone by mouth only. We have used corticotropin only in the fluid form intramuscularly. Roughly equal numbers have been treated with each hormone. At times we begin treatment with corticotropin but change to cortisone for maintenance.

All rheumatic fever patients are given a three-day course of intramuscular penicillin on admission. Recently penicillin has been administered orally 100,000 units four times daily as prophylaxis throughout the remainder of the hospital stay. Patients receiving cortisone or corticotropin receive low salt diets and supplemental potassium salts, such as potassium acetate 1.0 gm. three times daily. Decompensated patients are kept in oxygen tents, are given mercurial diuretics and are digitalized.

The duration of treatment varies greatly. Ideally one would like to suppress the rheumatic activity until full recovery has taken place. We do not have the means of detecting this end point. In some cases, the total duration of the attack is so long that there may be more danger from prolonged hormone therapy than from low grade rheumatic activity. Our figures for duration of therapy reflect considerable trial and error. In general, six weeks of treatment, plus a tapering off period of one to two weeks is adequate for most cases. Some do well with less, others require more. Patients who need longer courses fall into three groups—the fulminating cases, those patients who

have been ill for weeks before treatment and have shown little tendency to improve spontaneously, and those patients whose response to the usual dosage of hormone is slow. We have not been satisfied with the results of treatment for less than a month in patients with active carditis.

After cessation of hormone administration our patients are kept on complete bed rest for at least two weeks and thereafter until we feel convinced that there will be no relapse. After this their physical activity is increased slowly, step by step. The time required for return to normal activity varies with the severity of the attack. Sulfadiazine prophylaxis is used during convalescence and will be continued for several years.

TABLE V.

Deaths	2
Increase in Heart Size	2
New Valve Lesion During Treatment	1
New Valve Lesion During Relapse	1
Serious Relapse post Treatment	5
Minor Activity post Treatment	15
Decrease in Heart Size	14
Disappearance of Signs of Valve Lesions	4
Improvement in EKG	35

Results

Patients with rheumatic fever of moderate severity respond dramatically to corticotropin or cortisone. The severely ill respond slowly. Fever, joint signs and symptoms, rashes and pericardial friction rubs disappear with remarkable rapidity. Improvement in heart tones and disappearance of gallop rhythm are slower, varying with the severity of the carditis. The low pitched mid-diastolic murmurs often heard during active carditis frequently disappear. Well transmitted apical systolic murmurs seldom disappear, but do change in quality and intensity. Dramatic change in heart size occurs only where there has been pericarditis; small decreases in heart size, probably representing disappearance of dilatation are not infrequent. In this series one minimal aortic lesion was first recognized during treatment, and one new mitral lesion became manifest during relapse after termination of a two-week course of cortisone. Two hearts became slightly larger in relative size.

As to laboratory findings, in most instances sedimentation rates and electrocardiograms became normal within three weeks of institution of hormone therapy. Hemoglobin usually rises to normal levels in three or four weeks without transfusions or medicinal iron.

There were two deaths. One was a five-year-old girl who was in extreme cardiac failure on admission. She improved but never established cardiac compensation and died in failure six months later. The second was a ten-year-old with a very atypical history. She was known to have arrested tuberculosis. A review of her films revealed cardiac enlargement of at least three months' duration. On admission this child was in cardiac failure, had a very enlarged heart with a well-transmitted apical systolic murmur, and fever. During the first forty-eight hours in the hospital her course was so adverse that it was felt that the danger of hormonal therapy as related to her healed tuberculosis was less than the danger to her life from the current illness. She improved on corticotropin but still had an elevated sedimentation rate and prolonged p-r interval when she died suddenly about one month after admission. It is possible that this death was related to the treatment. Permission for autopsy was not obtained.

Relapses have been divided into two groups—serious relapses, during which there was some evidence of increased cardiac damage, and minor relapses which consisted of temporary increases in sedimentation rates or adverse electrocardiographic changes or both. This latter group is hard to differentiate from so-called post hormonal "rebound" or "flare."

There were five serious relapses. Of these, two were obviously undertreated, having received only two weeks or less of hormone therapy. The third was precipitated by acute tonsillitis which occurred shortly after treatment had been stopped. Of the remaining two, one was a very severely ill boy who probably would have died without hormonal treatbent, and who continued to have evidence of low grade rheumatic activity for a long time after cortisone was discontinued. The fifth patient was a girl whose attack had been going on several weeks before treatment was started and whose response to cortisone was slow. Evidence of low grade activity lasted about two months after cessation of treatment and the heart enlarged slightly.

The fifteen patients who were considered to have minor activity after cessation of hormone treatment all improved spontaneously with no increases in heart size or fresh valvular involvement.

Of the so-called side effects of cortisone or corticotropin only two, euphoria and salt and water retentions were really troublesome. Because of euphoria, many children were difficult to keep quiet at times when their cardiac status indicated maxi-

mum rest. The tendency to fluid retention complicates the handling of decompensated patients but judicious use of mercurial diuretics overcomes this difficulty. We ignored moon face, striae and acne. There was never a serious degree of either hypertension or glycosuria. One patient had abscesses at the site of corticotropin injections, one had furuncles which responded to penicillin. One patient came down with mumps and another with chicken pox while under treatment. The hormones were discontinued temporarily in these instances. The courses of both concurrent infections were typical.

It is probable that some few lives were saved among the group of fifteen patients admitted in cardiac failure. More striking is the fact that there was very little evidence of increase in cardiac damage after institution of treatment in the surviving patients.

There was no conclusive difference in the results of one hormone as compared with the other, but the advantages of oral medication are obvious.

Cases of chorea have not been included in this report. We have treated only a few such patients with hormones and have not observed any strikingly beneficial effects.

Discussion

Among these forty-four cases, there are twelve in which the response to salicylates was inadequate, and that to hormone striking. Cortisone and corticotropin are obviously much more potent antirheumatic agents than the salicylates. In our experience, patients who did not have demonstrably active carditis did so well on salicylate therapy that we have not felt it necessary to use hormones in such cases. Many patients with mild carditis would probably do as well on salicylates as on the hormones. This does not mean that the physician is never justified in using cortisone or corticotropin unless cardiac involvement is obvious. It does mean that he need not feel impelled to rush into hormonal treatment before diagnosis of rheumatic fever is established, and that in the less severe cases he has a choice of therapeutic agents. Severity of rheumatic fever is to be judged in terms of cardiac involvement, not joint involvement or fever. In severe attacks of rheumatic fever cardiac damage occurs early and is readily demonstrable. Whether salicylate or hormonal treatment is elected, close observation of the patient is essential, not only during treatment but also during convalescence.

Summary

The treatment of rheumatic fever as carried out at the Children's Hospital of Michigan has been outlined, with emphasis on the use of cortisone and corticotropin.

Results of hormonal treatment of 44 patients have been tabulated.

Cortisone and corticotropin are useful aids to the treatment of rheumatic fever, especially in its more severe forms.

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THE APPORTIONMENT OF OUR LIVES

According to a study made by the University of Wisconsin psychology class, if you live to be seventy, you will have spent one year on the telephone; about twenty years sleeping; two months signing pay checks for twenty solid years of work done; five years shaving and dressing; five months tying shoes; two and a half years smoking; seven years in sports and three years just waiting on something or somebody. They don't say where you will have spent the rest of your time. Neither do we attempt to say, but we ponder sadly on the possibility that we might have amounted to something if we hadn't slept so much.—*Battle Creek Kiwanis News Letter.*

Studies with the Flicker Photometer

By Donald C. Overy, M.D.
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IN 1950 Krasno and Ivy[4] first proposed the use of an instrument called the flicker photometer as an aid in the diagnosis of coronary artery disease. It was felt that if used properly this instrument not only would help in the differential diagnosis of patients with atypical chest pain but also would serve to pick out those individuals who might later develop serious degenerative heart disease. It was postulated by Krasno and Ivy that nitroglycerine would appreciably change this threshold of light fusion in a particular manner indicative of the nature of the patient's vascular system. They theorized that in hypertension, for example, anatomic changes in the retinal arteries are always preceded by vasospasm and that nitroglycerine administered to such a subject would result in an increased supply of oxygen to the retina and consequently raise the flicker fusion threshold. Conversely, with normal retinal arterioles it was postulated that nitroglycerine would cause sufficient dilatation of the vessels to induce passive congestion of the retinæ and result in a decrease in the flicker fusion threshold. On the basis of these differences, therefore, it was felt that the test could be used to indicate or to predict a vasospastic element present in the retinal arterioles which might parallel a similar condition of the coronary vessels.

The instrument devised by these workers for determining the threshold of light fusion consists of a stable electronic oscillator driving a synchronous motor which rotates a hollow metal cylinder with a window on one side. A small incandescent lamp inside the cylinder thus gives a flashing light which is thrown on a small ground glass window.

Our studies with the flicker photometer may be divided into two parts. The first were concerned with the accuracy of the instrument itself, and tests were carried out to see whether the calibration of the dial in flashes of light per minute was correct and to be sure that a given setting of the dial would always give flashes at the same rate. The second part of the work was devoted to studies on sixty-seven normal subjects and eleven patients with coronary artery disease, carried out according to the technique described by Krasno and Ivy.

Methods

To test the adequacy of the flicker photometer itself, a suitable photocell was placed close to the ground glass window and the amplified output of the cell was compared with that of a Hewlett-Packard 201B low frequency oscillator and the 60-cycle AC power line by means of a cathode ray oscillograph.

The method originally described by Krasno and Ivy was followed in all of the tests done on normal subjects and on patients. Care was exercised to thoroughly instruct the subjects under test to respond promptly at the first evidence of flickering as the frequency of flickering was decreased. Several determinations were made prior to the administration of nitroglycerine in order that the patient become familiar with the method employed and in order that an accurate base line determination was obtained prior to the use of the medication. Following the determination of the average fusion threshold nitroglycerine was administered in the form of a sublingual tablet (0.0004 gm.), and the fusion threshold was determined at two, four and six minute intervals following administration of the tablet. An average fall of the fusion threshold of 60 cycles or more per minute was considered to be a significant alteration from the base line determination and was interpreted as a normal response, An average rise of the fusion threshold of 60 cycles or more per minute was considered to be a significantly positive test and to suggest the probability of vasospastic disease of the coronary arteries. In those individuals in whom the fusion threshold was unaltered from this range of 60 cycles or more per minute after the administration of nitroglycerine, a second tablet was given under the same conditions, and subsequent determinations were made. If there was still no significant alteration from the base line determination the test was considered to be negative. The distance of the patient from the machine and the lighting conditions of the room were kept constant at all times during each deter-

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The material in this paper was presented briefly at a panel discussion on the use of the flicker photometer at the annual meeting of the Michigan Heart Association on March 14, 1952.

TABLE I. STUDIES WITH THE FLICKER PHOTOMETER

	No.	Threshold		
		Lowered	Unchanged	Elevated
Medical students	46	23(50%)	20(43%)	3(7%)
Student nurses	15	9(60%)	5(33%)	1(7%)
House staff	6	1(17%)	5(83%)	0
Recent infarction	8	2(25%)	6(75%)	0
Angina pectoris	3	0	3(100%)	0
Totals				
Normal subjects	67	33(49%)	30(45%)	4(6%)
Coronary disease	11	2(18%)	9(82%)	0

mination. Subjects were instructed not to smoke for at least two hours prior to the test. If for any reason a test was considered to be unsatisfactory or if the base line readings were inconstant, the data was not included in the present study.

Results

The results of the tests done to find out whether the photometer itself was a good instrument and adequate to study flicker fusion phenomena accurately may be summarized very quickly. Studies comparing the frequency of light flashes of the photometer with the 60-cycle AC line voltage were considered more accurate than comparisons with the low frequency oscillator, and these indicated that the instrument was quite satisfactory. In the central part of the dial the accuracy of the flashes was nearly perfect, and at the lowest and highest frequencies an error of not over 3 per cent was found. Furthermore, the frequency of the flashes for a given dial setting was constant from one time to another.

Table I summarizes the results of the flicker fusion tests in the entire group that we studied. Of the forty-six normal medical students, twenty showed no significant alteration of the flicker fusion threshold, even after the administration of a second nitroglycerine tablet. Twenty-three medical students showed a decrease of 60 cycles or more per minute following the administration of nitroglycerine, which has been described as the usual normal response. The remaining three individuals had distinctly abnormal responses with a rise of the fusion threshold 60 cycles or more per minute. A similar division was noted among the student nurses. Five nurses showed no significant change in the fusion threshold, while nine had a significant decrease in the fusion threshold. Only one of this group had a significantly positive test. Of the six house staff none had positive tests, and only one had a significant lowering of his fusion threshold. In summary, of the sixty-seven normal subjects slightly less than half of them (thirty) had no change after nitroglycerine, while thirty-three had a lowering of the fusion threshold. Four individuals had positive tests.

Of the eight patients with recent myocardial infarction (within the preceding six weeks), six had no change in the fusion threshold, and two had a lowering of this threshold. No one in this group had a positive flicker test. Three patients with definite angina pectoris, but without previous myocardial infarction, showed no alteration in the flicker fusion threshold, despite the administration of a second nitroglycerine. There was no one with a positive test in this entire group.

Discussion

It is quite apparent that these data do not support the claims of Krasno and Ivy relative to the diagnostic value of the flicker test. Although only a small percentage of positive tests was discovered among normal subjects, nearly half of this group failed to show any significant alteration of the fusion threshold after the administration of a second nitroglycerine tablet. Even more significant is the fact that none of the patients who had definite known coronary artery disease were found to have positive flicker fusion tests. Similar results have been reported by Fox and Wright,[2] Russek, Anderson and Doerner,[5] and by Keys and Simonson.[3] A study on a large group of young normal subjects by Chambers and Kozonis[1] showed a rather large number of positive tests initially, but when the individuals with positive tests were subsequently given another examination many of them were negative.

Sufficient evidence has been accumulated to make it quite clear that the nitroglycerine-flicker test has no place in the diagnosis of degenerative heart disease. To use the method for this purpose and especially to employ it for the recognition of early cardiac involvement will do far more harm than good. Grave doubts regarding the usefulness of the test in estimating spasm of the retinal arteries has been raised, but even if the test is a good one for this purpose, it is not justifiable to assume that spasm of arteries in the eye has any clear relationship to the condition of the coronary arteries.

(Continued on Page 83)

Metastatic Sarcoma of the Heart Diagnosed Antemortem

By Thomas N. James, M.D.

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INVOLVEMENT of the heart by malignant neoplastic disease is more common than generally supposed. In an accumulated series of 8,414 autopsies performed on patients dying of cancer, Prichard[5] calculated that there were 3.9 per cent cardiac metastases. Carcinoma of the breast, carcinoma of the lung, sarcoma of the lymphatic system and melanoma of the skin accounted for almost half of these metastases, the other half arising in scattered foci.

Approximately 500 secondary tumors of the heart have been reported in the world literature; twenty of these were diagnosed antemortem. Primary tumors of the heart are less common, about 113 having been reported. Of these, five have been diagnosed *in vivo*. The cell type of primary tumors has varied widely but the two commonest have been myxoma and sarcoma (of various origin). Some of these primary tumors were tiny fibromatous nodules on the septum or valves and were of no clinical significance. Of the 100 cases summarized by Whorton[7] as primary tumors of the heart, forty-seven had metastases to organs other than the pericardium, most often to the lung. Considering the primitive cell type (e.g. "round-cell," "pleomorphic," et cetera) of most of these forty-seven tumors, it is difficult not to believe that some of these "primary" tumors were actually metastases.

The fact that so few cardiac tumors have been diagnosed antemortem has prompted many authors to attribute such diagnosis to fortuitous circumstances and luck. Although pathognomonic criteria are not available, diagnosis by exclusion is feasible and, as pointed out by Yater,[8] the principal requirement is that the condition be considered. With the technique of cardiac surgery improving so remarkably in recent years, and with artificial heart-lung preparations almost a present reality, the diagnosis of cardiac tumors has assumed more than an academic interest.

Means by which this diagnosis may be derived have been discussed by Yater,[8] and more recently, by Doane and Pressman.[1] To avoid unnecessary repetition, the clinical features suggested by them and others[6] will be listed without discussion:

1. Sudden onset of cardiac failure, often intractable and with no other explanation for heart disease.
2. Unexplained pericardial effusion, which may contain malignant cells.
3. Postural alteration in murmurs; postural syncope; when murmurs or syncope exist without apparent explanation.
4. Bizarre x-ray appearance of the cardiac silhouette.
5. Cardiac arrhythmias without apparent cause, refractory to usual therapy, and varying in type.
6. Presence of malignancy elsewhere with new findings of cardiac disease.
7. Embolic phenomena with sterile blood cultures and no evidence of thrombosis.

Within the past few years, technical procedures which will assist in such a diagnosis have been discussed. Lubschitz[3] and his associates reported a case in which the diagnosis was suggested by the bizarre x-ray appearance of the heart after pericardial paracentesis with insufflation of air. Doane[1] emphasizes the importance of the presence of a fixed right cardiac border in fluoroscopy. Malignant cells seen in Papanicolaou smears of pericardial fluid have been reported by several authors. Mahaim[4] suggests the value of angiocardiography, especially in suspected myxomas (the commonest primary cardiac tumor), since this particular tumor is almost always pedunculated and is highly vascular; no one has so far reported clinical experience with this procedure in cardiac tumors.

The case herein reported is one of a sarcoma metastatic from the uterus to the cavity of the right ventricle. Although eight cases of carcinoma of the uterus metastasizing to the heart have been reported, none of these was diagnosed *in vivo*. No case of sarcoma so metastasizing has been reported as antemortem or postmortem diagnosis.[2]

Case Report

Case 1.—H. A., was a fifty-eight-year-old housewife with two children. Menopause had occurred at the age of fifty-two and was not remarkable. She was first seen, regarding right lower quadrant pain, in the Gynecology

From the Division of Cardiology of the Henry Ford Hospital, Detroit, Michigan.

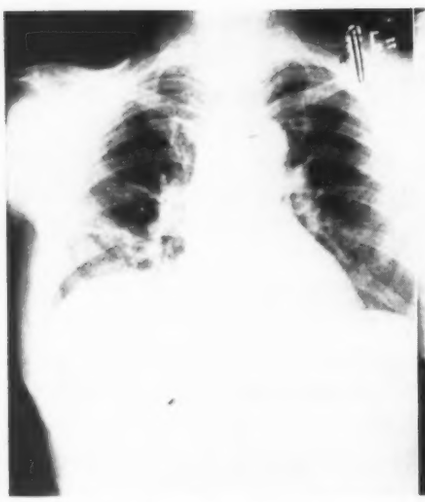

Fig. 1. Chest x-ray October 11, 1951. Plate-shaped atelectasis in the right base with pneumonitis above it. Cardiac silhouette within normal limits.

Fig. 2. Chest x-ray April 29, 1952. Atelectasis gone. Heart is larger and some bulge is apparent in the upper half of the right border.

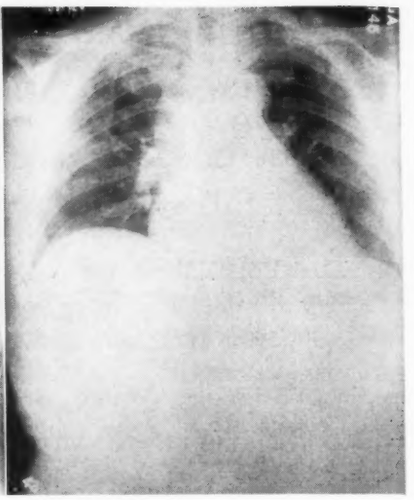

Fig. 3. Chest x-ray May 13, 1952. Straightening of the left heart border; generalized cardiac enlargement; upper right border markedly bulging.

Clinic on September 11, 1951. The pain had been present for six months and was progressively increasing. The temperature was 99.6 F. Examination revealed a tumor the size of a four-month pregnancy in the right lower quadrant; no murmurs were heard on cardiac auscultation. Intravenous pyelograms showed a calcified mass in the right lower quadrant. Photofluorogram of the chest was normal; x-rays of the pelvis and lumbosacral spine demonstrated the previously mentioned pelvic calcification and slight hypertrophic arthritis.

Since the pain persisted, she was admitted to the hospital, September 15. That day one observer heard a soft apical systolic murmur which was not transmitted. Four days later, another observer was unable to hear any murmurs. The blood pressure the day of admission was 122/84 mm. Hg. The Kline exclusion test was negative. Proctoscopic examination and barium enema were normal, as were x-rays of the stomach. Blood count September 18, was as follows: hemoglobin of 11.1 gm.; red blood count, 3.6 million; white blood count, 7,100 with 82 per cent polymorphonuclears, 1 per cent eosinophils and 17 per cent lymphocytes. Urinalysis was normal. Cholecystograms revealed cholelithiasis. Following reexamination in the gynecology department, hysterectomy was advised.

On September 21, the sixth hospital day, a total hysterectomy with bilateral salpingo-oöphorectomy and appendectomy was performed. The fibroid on gross section resembled sarcoma and the histopathological report was highly anaplastic leiomyosarcoma with extensive necrosis. The postoperative course was marked by general malaise, weakness and nausea. Chest x-ray the twenty-sixth hospital day demonstrated several areas of plate-shaped atelectasis in the right base with pneumonitis above them. Throughout the hospitalization, the pation maintained a low grade fever which did not respond to antibiotics. Just prior to discharge on the twenty-ninth hospital day, a small firm mass the size of a golf ball was palpable just above and to the right of the umbilicus.

When the abdominal mass persisted, she was advised to have a cholecystectomy and re-entered the hospital on April 8, 1952. The next day she was seen for a routine preoperative cardiological consultation. A gruff grade II systolic murmur was transmitted from the xiphoid up along the left sternal border to the pulmonic area. The hemogram was as follows: hemoglobin, 10.6 gm., red blood count, 3.61 million; white blood count, 11,350 with 87 per cent polymorphonuclears, eosinophils 1 per cent and 12 per cent lymphocytes; urinalysis showed a faint trace of albumin but was not otherwise remarkable. Chest x-ray was negative for evidence of metastasis to the lungs or ribs but the heart was enlarged. The electrocardiogram, the second hospital day, demonstrated early right ventricular hypertrophy (Fig. 4). At that time two possible diagnoses were entertained: subacute bacterial endocarditis (the low grade fever had persisted) and metastatic involvement of the right side of the heart. Seven venous and one arterial blood cultures were obtained and were all sterile, whereupon the chief consideration became secondary cardiac tumor. The hematocrit was 35 mm. and the corrected sedimentation rate 43 mm./hr. (Wintrobe).

On the seventh hospital day, a laparotomy was performed and the gall bladder, containing a 2 cm. mulberry stone, was removed. The palpable tumor proved to be metastatic sarcoma of the abdominal wall histopathologically identical to the primary tumor. During the operation, the patient received two 500 cc. transfusions of whole blood, and eleven days postoperatively, the hemogram showed sustained improvement: hemoglobin, 14.4 gm.; red blood count, 4.02 million; white blood count, 13,500, with 80 per cent polymorphonuclears, 20 per cent lymphocytes. Progress chest x-ray April 29, two weeks postoperatively, revealed increase in heart size, especially on the right (Fig. 2). The same day she be-

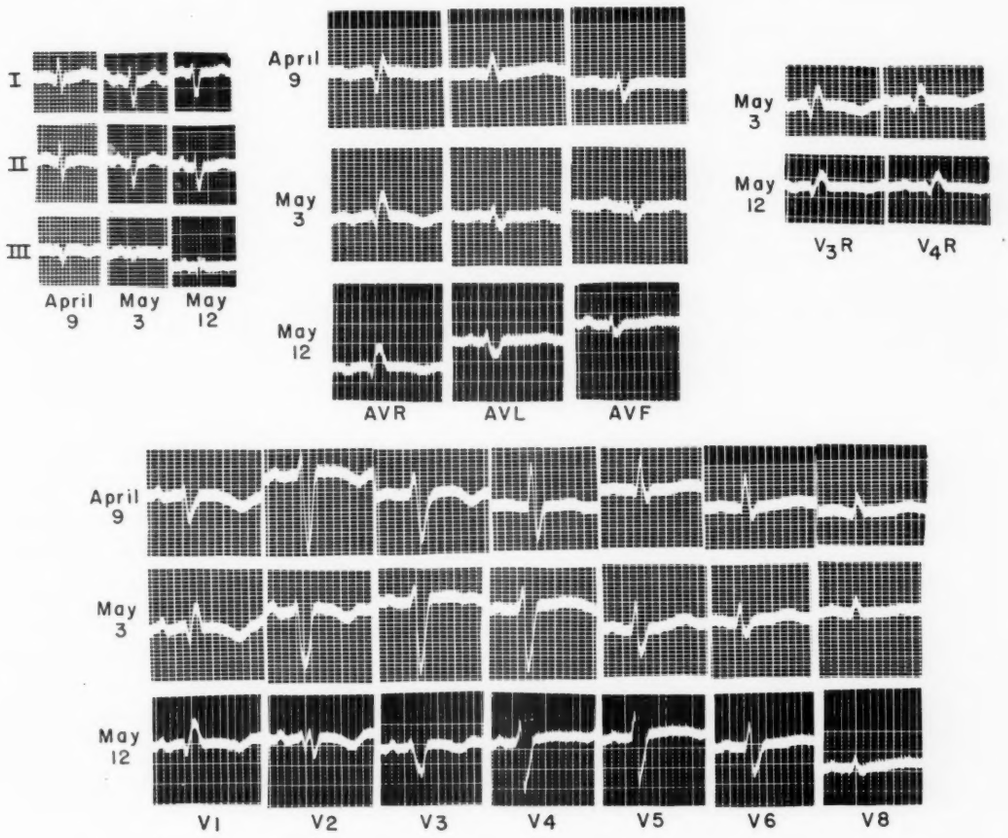

Fig. 4. Electrocardiograms reveal progressively increasing right bundle branch block, paralleling the clinical increase in symptoms. Well demonstrated in practically all leads.

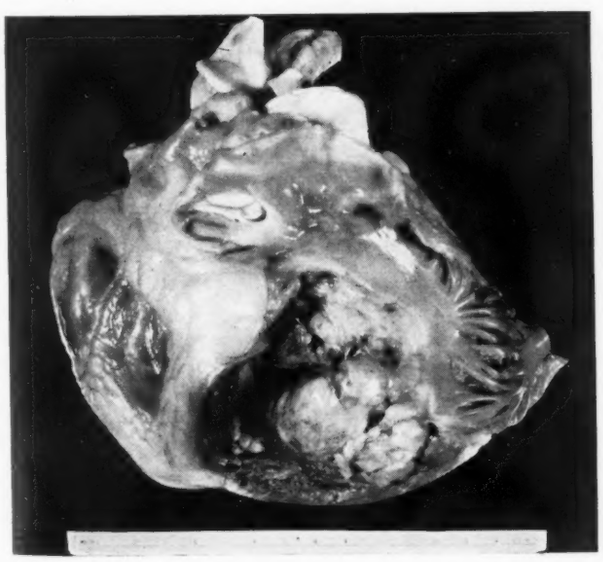

Fig. 5. The right ventricle is opened and the wall retracted upward. The cauliflower-like mass is seen in the right ventricular cavity and extrudes up through the main pulmonary artery in the upper center of the photograph.

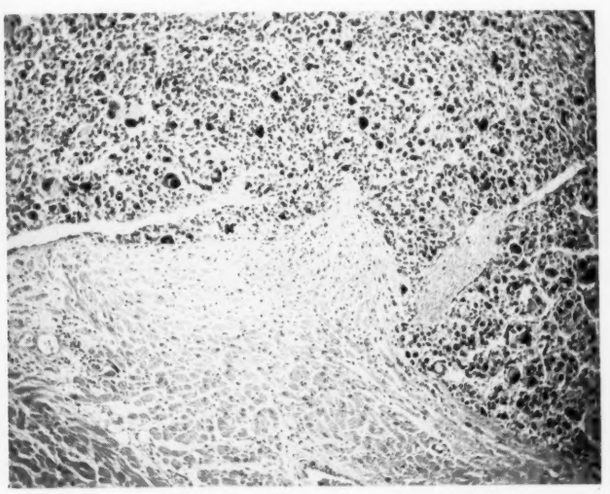

Fig. 6. The highly anaplastic sarcoma tissue is seen adjacent to normal myocardium. The tumor cytology is identical to that found in the uterine and abdominal wall tumors.

gan to manifest dyspnea and slight cyanosis with tachycardia on minimal exertion, e.g., walking five feet from a chair to bed. This problem steadily increased until the least physical stress left her gasping with fish-mouth type respiration and definite cyanosis. The venous pressure eighteen days postoperatively was 150 mm. water and the circulation time arm to tongue was seventeen seconds (Decholin) and arm to lung nine seconds (Ether). Progress electrocardiogram that day demonstrated progression in the findings of right ventricular hypertrophy, and there was now some right bundle branch block (Fig. 4).

The progression in electrocardiogram changes, the enlargement of the right side of the heart on chest x-ray, the dyspnea and cyanotic pallor, the absence of evidence radiologically of metastasis to the lungs or mediastinum, the gruff new systolic murmur in the pulmonic area which persisted when the anemia was corrected, the sterile blood cultures, all indicated there was probably metastatic sarcoma in the right side of the heart interfering with pulmonary artery flow.

Average of three vital capacity determinations was 2,000 cc. Venous pressure redetermined the twenty-first postoperative day was 125 mm. water, rising to 240 mm. water with liver pressure. She was given a therapeutic trial injection of 1 cc. Thiomerin daily for two days, but her weight did not change, remaining 125 pounds. Her symptoms did not improve with sedatives or vasodilators. Cardiac fluoroscopy produced no new evidence. The twenty-fifth postoperative day, a protodiastolic gallop rhythm was heard for the first time and persisted thereafter. Progress electrocardiogram demonstrated further increase in the right bundle branch block (Fig. 4). Progress chest x-ray revealed remarkable increase in the fullness of the upper half of the right border of the heart (Fig. 3). On the twenty-eighth postoperative day, the patient suddenly sat up in bed, markedly dyspneic and cyanotic, and expired.

Post-mortem examination was performed and revealed small metastatic lesions in the lungs and kidneys. Within the cavity of the right ventricle there was a large polypoid cauliflower-like mass filling most of the cavity and extruding up through the main pulmonary artery, almost occluding its lumen (Fig. 5). The pericardium was smooth and glistening and there was no external evidence of tumor. The histopathology was identical with the primary tumor in the uterus and revealed highly anaplastic sarcoma (Fig. 6).

Comments

The sequence of events in this case made secondary cardiac tumor the most tenable antemortem diagnosis. Without clinical evidence of preceding heart disease, the patient developed recurring acute cardiac failure shortly after demonstration of a metastasizing sarcoma. Since sarcoma, almost without exception, metastasizes as a "ball," the negative lung x-rays were evidence against presence of sufficient pulmonary metastasis to produce right-sided failure. That failure was not sustained (normal circulation times, minimally elevated venous pressure) made it ever more unlikely that pulmonary or mediastinal metastasis was the mechanism.

The cause for the right bundle branch block affords interesting speculation. The tumor invaded the septum and undoubtedly produced some mechanical block by destroying bundle branches, but there was also considerable dilation and some hypertrophy of the right ventricle. Both processes undoubtedly contributed to the electrocardiogram pattern.

Summary

1. The first reported case of sarcoma of the uterus metastatic to the heart is presented.

2. Basis for the antemortem diagnosis is described.

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Statistics compiled by the Metropolitan Life Insurance Company reveal that in the brief period since the end of the war, the average length of life (the expectation of life at birth) of the industrial population of the United States has increased by about two years. In 1948, the average reached the all-time high of 67.16 years. Since 1911-12, when this series on the longevity of the industrial population was started, twenty and one-half years have been added to the expectation of life at birth.

A Simplified Technique for Wiring Aneurysms

By Sidney H. Orr, M.D., and
Prescott Jordan, Jr., M.D.
Dearborn, Michigan

THE SURGICAL treatment of aortic aneurysms has been reviewed by both Blakemore[1] and de Takats.[2] At the present stage of the surgical attack upon such problems, wiring is occasionally a necessary facet of the surgeon's armamentarium.

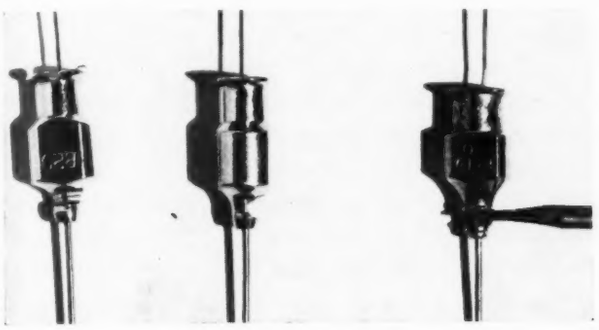

Fig. 1. Apparatus described.

Any surgeon who has undertaken such a step is well aware of the great consumption of time and energy attending. A simplification and speeding of the technique is of interest to those who are concerned with such surgical procedures and we present in this paper a method which has worked well in our hands.

The apparatus utilized in this technique consists of:

1. A 20 gauge 3.5 inch spinal needle which has been altered by grinding a groove on one side of the hub above its junction with the shaft, to a depth necessary to enter the channel of the needle. (Fig. 1)

Fig. 2. Preoperative view.

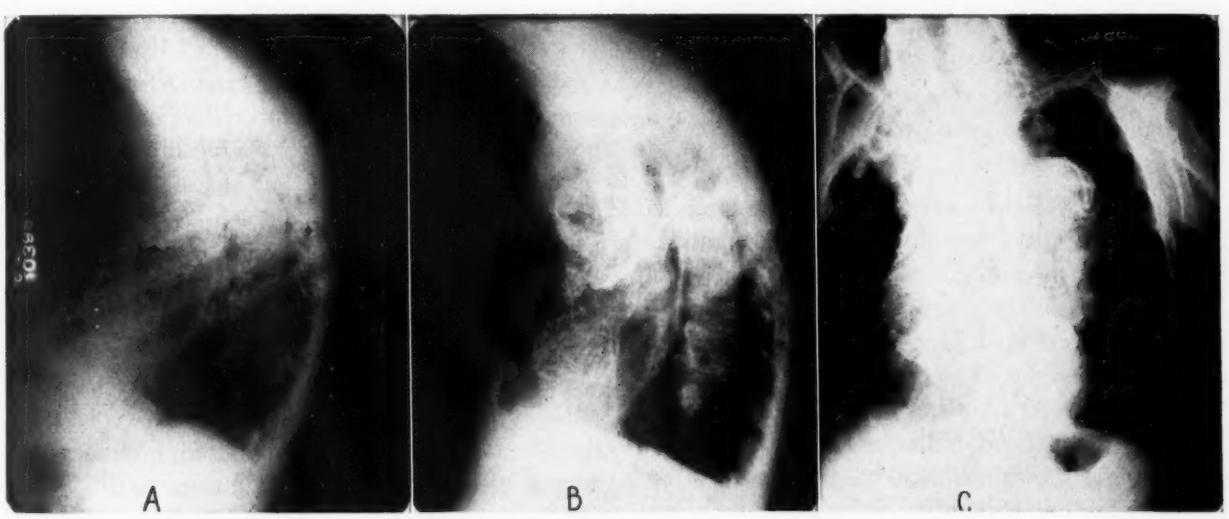

Fig. 3. (a) Lateral view after first operation; (b) lateral view after second operation; (c) oblique view after the second operation.

2. A motor driven dental hand piece and a No. 700 fissure dental burr.

3. No. 30 stainless steel wire.

The technique consists of a percutaneous puncture of the aneurysm with a spinal needle, following which the stylet is removed and the No. 30

(Continued on Page 70)

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Hereditary Capillary Fragility

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IN 1926 von Willebrand[15] published a study of a familial hemorrhagic disease, as observed in the inhabitants of a small island in the Baltic Sea. In his group the bleeding time was found to be markedly prolonged, with normal platelet counts and coagulation time. von Willebrand gave the name "pseudohemophilia" to this bleeding diathesis. Subsequently, many papers,[5,6,8,13] have appeared describing familial hereditary hemorrhagic diseases of similar type, under the following names: athrombocytopenic purpura, pseudohemophilia, constitutional thrombocytopathy, hereditary hemophilioid purpura, Glanzmann's disease, and von Willebrand's disease. More recent literature has placed this syndrome under the term "thrombasthenia."[7] In 1950, the Committee for the Clarification of Nomenclature of Cells and Diseases of the Blood and Blood Forming Organs, recommended the adoption of the term "Hereditary Capillary Fragility" for the vascular type (von Willebrand's disease). "Thrombocytopathic Purpura" was suggested by the same group to replace Glanzmann's disease.[4]

Studies by various investigators have established hereditary capillary fragility as a definite entity in hemorrhagic disease. It has been shown[14] that hereditary capillary fragility is transmitted as a dominant, sex linked Mendelian characteristic in the X chromosome. The disease affects both sexes, but occurs more frequently and severely in the female. Members of either sex may act as carriers without showing clinical manifestations of abnormal bleeding. Sporadic cases are not uncommon; in one series of eleven cases, only four patients gave a definite history of familial bleeding.[5] The mechanism for the abnormal bleeding in hereditary capillary fragility has been studied by Macfarlane.[12] He reported observations on capillary microscopy on patients with this disorder, noting the capillaries to be distorted and often of bizarre form. Using a glass fiber, he found that the capillaries did not contract normally after trauma, suggesting a vascular defect in this disease. These observations were confirmed in one case by Perkins[13] who also noticed a failure of capillary constriction. Others have reported normal capillary morphology.[5] The microscopic features of petechiae formation have been studied by Humble[9] and Landis.[10] Alexander[2] reported an unusual patient with thrombasthenia who developed thrombocytopenia. Aggeler[1] has a similar observation in one case, suggesting a possible relationship between these two diseases. From the literature most of the patients with hereditary capillary fragility continue to have episodes of abnormal bleeding throughout their lives. Death by exsanguination following minor surgical procedures has been reported but, at the same time, other patients have undergone major abdominal surgery without excessive bleeding. Estren,[5] et al, in a review of the literature, (sixty-four patients to which they added eleven cases) reports the bleeding site in order of frequency, as follows: Nose 75 per cent, skin 70 per cent, gums 39 per cent, postoperative bleeding (including dental extractions) 31 per cent and bleeding into joints 12 per cent.

The present report concerns observations on twenty-four patients classified as hereditary capillary fragility seen at the Henry Ford Hospital from 1940 to 1950 (Table I). The criteria for the diagnosis in these cases were: (1) definite history of abnormal bleeding; (2) increased bleeding time; (3) normal platelet count; (4) normal or near normal coagulation time.

The disease was observed in fourteen females and ten males. This is in keeping with reports of a higher incidence (approximately 3:2) in females.[15] The youngest patient in our series was four and the oldest seventy-four years of age. Four patients were under ten years of age at the time the disease was diagnosed. In four instances abnormal bleeding had been noted since birth. Table II lists the site of the abnormal hemorrhagic episodes which occurred during the period of observation in the twenty-four cases.

The type of bleeding in all instances was characterized by being immediate and brisk, without delayed hemorrhage, as is frequently seen in the hemophiliac. As in other series, epistaxis was the most common complaint, with ecchymoses and dental extraction hemorrhage as a frequent finding. In our cases, menorrhagia, lacerations, postoperative bleeding (tonsillectomy, postpartum and

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TABLE I. CLINICAL AND LABORATORY FINDINGS IN 24 CASES OF HEREDITARY CAPILLARY FRAGILITY

Case	Age	Sex	Hemorrhagic Manifestation	Family History	Bleeding Time in Minutes (Duke)	Clotting Time in Minutes (Lee-White)	Tourniquet Test	Clot Retraction	Platelet Count 10^3	Vitamin C	Prothrombin Per Cent	Protamine Titration mg.	Capillary Microscopy
1	52	F	Epistaxis Post-Dental Extraction Menorrhagia	Negative	13	4	Positive	Normal	160		90		
2	41	F	Ecchymoses Myalgia	Brother Sister	23	20	Positive	Normal	242		86	0.10	Normal
3	55	F	Epistaxis	Negative	11	16 8 10			261		90	0.16	
4	74	M	Epistaxis	Negative	10	7	Positive	Normal	188		100	0.18	
5	19	F	Epistaxis Ecchymoses	Negative	13	11	Negative	Normal	220		90		
6	29	F	Ecchymoses	Negative	9	18 8 12	Positive	Normal	160		100	0.12	Normal
7	34	M	Laceration Post-Dental Extraction	Father	9½	10	Negative	Normal	178		100		
8	21	M	Melena	Grandfather Uncle	28	10		Normal	196				
9	29	M	Hemarthrosis	Negative	8½	11½	Positive		206				
10	37	F	Menorrhagia Epistaxis	Daughter	13	7½	Positive		234	0.34	100		
11	14	M	Epistaxis Post-Dental Extraction	Negative	8½	7		Normal	238	0.72	100		Normal
12	21	M	Ecchymoses Post-Dental Extraction Laceration	Brother	34	10			168	0.30	100		
13	25	F	Post-Dental Extraction Laceration	Negative	8½	8		Normal	218	0.54	100		
14	52	F	Menorrhagia Post-Tonsillectomy	Niece Nephew	9	12	Negative	Normal	200				
15	44	M	Epistaxis Hemarthrosis	Uncle Grandfather	30	27 9 12	Positive	Normal	186	0.40	100		
16	45	F	Menorrhagia Ecchymoses	Negative	14	22 10	Positive		236				
17	21	M	Melena, Post-Tonsillectomy Laceration	Grandfather	28	11		Normal	196				Normal
18	49	F	Menorrhagia Epistaxis	Negative	24	10½	Negative	Normal	226		100		
19	6½	M	Hematemesis Epistaxis	Mother	10½	8	Positive	Normal	216		100		
20	56	F	Ecchymoses Post-Dental Extraction	Negative	10	10	Negative	Normal	302	1.19	100		
21	53	F	Epistaxis	Negative	8	9	Positive	Normal	192		100		
22	45	F	Ecchymoses	Son	16	7	Positive	Normal	240		100		Normal
23	5	M	Laceration Epilepsy Epistaxis Ecchymoses	Mother Uncle	10½	11	Negative	Normal	227		100		
24	9	F	Post-Dental Extraction	Mother	9	8	Positive	Normal	264		100	0.10	

post-dental extractions), gastro-intestinal bleeding, and bleeding into the joints were encountered less frequently than noted in previous reports. Petechiae were not noted.

It was not uncommon for the patient to complain of vague distress in reference to the joints of the extremities. Myalgia was usually accompanied by large ecchymoses of the thighs with the suspicion of deeper hemorrhages within the muscles themselves. In one patient (case fifteen) the joint symptoms were most troublesome. The knees and elbows were frequently involved. Onset of symptoms was always related to some unusual form of physical exertion or trauma. Following injury, the affected limb was useless, with painful immobilization usually lasting twenty-four hours. Examination of the affected joint at that time was noteworthy for the lack of signs of disease, except for pain on motion. On the second or third day, subcutaneous discoloration would occur about the

TABLE II.
SITE AND FREQUENCY OF ABNORMAL BLEEDING IN 24 CASES OF HEREDITARY CAPILLARY FRAGILITY

	Cases	Per Cent
Epistaxis	13	54
Ecchymoses	12	50
Postoperative (Including post-dental extractions—6 cases)	14	58
Menorrhagia	6	24
Lacerations	6	24
Gastro-intestinal	3	12
Gums	2	8
Joints	2	8

joints, indicating previous deeper hemorrhage. The symptoms regularly cleared in three to four days without residual pain or limitation of motion.

A prolonged bleeding time was demonstrated in every patient. In nine patients the bleeding time ranged from eight and one-half to ten minutes; in nine patients, ten to twenty minutes; and in six patients, over twenty minutes. In five of the reported twenty-four patients, the coagulation time (Lee White) was beyond the normal range. In one patient the clotting time (on one examination) was twenty-seven minutes. This test was later repeated on several occasions, and found to be within normal range. In two other patients, clotting time was delayed to twenty to twenty-two minutes and in one patient, to eighteen minutes. In each instance, when this test was repeated on another occasion, it was found to be within normal limits. The tourniquet test was positive in twelve of eighteen patients tested at the time the diagnosis was made (Table III). The clot retraction was considered normal in the nineteen patients on whom the test was performed. The platelet counts were within normal limits. Morphologically, the platelets in the peripheral blood smear appeared to be normal. A family history of abnormal bleeding was elicited in twelve of our patients.

We were able to study the bone marrow of three of our patients. Quantitatively and qualitatively the bone marrow elements were found to be within normal range. In five patients protamine titrations for the detection of an increase in circulating heparinoid substances demonstrated no change from the accepted normal values.

Various forms of therapy have been suggested for the control of the abnormal bleeding. Such agents as calcium, ascorbic acid, water soluble vitamin K preparation (menadione) and splenectomy have resulted in uniform failure to control the bleeding tendency. It is recommended that bleeding be controlled by careful surgical technique, rest, cold applications, as well as pressure bandages and the rational employment of local agents as topical thrombin, thromboplastin and snake venom. Anemia due to hemorrhage was of sufficient degree in six of our patients to require blood transfusion. Ferrous sulfate very quickly returned the blood hemoglobin to normal levels in others who had lost iron through their bleeding tendency. Prophylactically, it is recommended that patients having this type of hemorrhagic disorder should avoid trauma and non-essential surgical procedures.

TABLE III.

	Cases	Per Cent
Tourniquet Test, positive (18 cases tested)	12	67
Family History, positive	12	50
Delayed Clotting Time	4	18

In view of the capillary factor in this disease, we elected to give twelve of our patients large doses of rutin[3,11] (200-400 mg. daily). Although variations in the bleeding times and tourniquet tests have been observed from day to day in untreated patients, it was the clinical impression of the authors and the subjective opinion of the patients that rutin tended to lessen the severity of the bleeding symptomatology. While the criteria in estimating the value of this agent are not precise, it was noted that the bleeding time in nine of the twelve treated patients was considerably shortened, being reduced to normal in six instances. In these six patients the tourniquet test became normal while on rutin therapy. In view of these suggested findings, we have effectively utilized rutin prophylactically and therapeutically in minor surgical procedures, such as dental extractions.

Summary and Conclusions

1. Twenty-four cases of hereditary capillary fragility are added to the reported cases for a total of ninety-nine patients.

2. Capillary microscopy in five patients failed to demonstrate abnormalities in the morphology of the capillaries.

3. In five patients protamine titrations for the detection of circulating heparinoid substance gave normal values.

4. Rutin in divided doses of 200-400 mg. every day favorably influenced the bleeding tendency in some cases.

5. Examples of thrombocytopathic purpura (Glanzmann's disease) were not encountered.

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(Continued on Page 109)

Myocardial Infarction

Comparison of Results Following Use of Dicumarol and Dicumarol with Heparin in the Acute Stage

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THE USE of dicumarol in the treatment and prevention of thromboembolic disease has been generally accepted and included in the present-day therapeutic armamentarium. An intensive survey has been conducted in sixteen of this country's leading hospitals under the auspices of the American Heart Association and the United States Public Health Service to evaluate the usefulness of anticoagulants in coronary thrombosis.[16] Their observations have established the value of these products in coronary heart disease. In addition many reports have appeared in the literature regarding the various diagnostic and prognostic aspects of this disease.[1,3,9,11,12,13,15] This paper will not deal primarily with these problems.

In spite of all that has been written on the subject of coronary thrombosis and myocardial infarction only one report has appeared comparing the efficacy of heparin and dicumarol in combination and alone.[14] No reports have been published from smaller private hospitals in small or middle sized cities where there is closer personal contact with the patient, where hospitalization is more readily available and where, due to the smaller volume of patients, prothrombin times are commonly reported as per cent of normal using undiluted plasma. This is a simple linear relationship as contrasted with the parabolic curve obtained when diluted plasma is used and the results expressed in per cent of concentration.

In view of these facts it was felt that a survey of patients in a small (270 bed) private hospital might show a significant difference in complications and mortality rate as compared with reports from larger medical centers. Reports from private hospitals have the added advantage of affording a good comparison of cases since some physicians employed anticoagulants routinely while others chose not to employ anticoagulants in any of their patients.

This report includes all patients admitted to Butterworth Hospital between the period of July, 1947, to January, 1951, a period of three and one-half years, on whom a diagnosis of acute coronary thrombosis with myocardial infarction was established. Only those cases whose clinical course and electrocardiographic studies were diagnostic or those cases proven at autopsy were employed in this series.

There were 266 such cases admitted with eighty-eight deaths for an over-all mortality rate of 33 per cent. Of the total cases 218 were admitted after they had suffered their first coronary occlusion with myocardial infarction, thirty-eight after the second attack and ten after they had suffered the third attack. Mortality rates were 28.4 per cent, 52.6 per cent and 60.0 per cent, respectively. Fifty (57.4 per cent) of the eighty-eight fatalities were subjected to post-mortem examination (Table I) while the rest of the infarctions were localized on the basis of the electrocardiographic studies alone. One hundred and fifty-two were demonstrated to have had infarction of the anterior surface of the myocardium (57.1 per cent), eighty-four of the posterior myocardium (31.6 per cent) and thirty cases were not localized (11.3 per cent).

As can be seen from Table I, 26.9 per cent of the patients with anterior myocardial infarction died, whereas 33.3 per cent of the patients with posterior infarction died. This is not in agreement with Smith, Keyes and Denham's[14] report from

TABLE I.
MORTALITY RATES ACCORDING TO LOCATION OF INFARCTION AND NUMBER OF PREVIOUS INFARCTIONS

	Cases	Deaths	Mortality
Total number	266	88	33.0%
No previous history	218	62	28.4%
One previous attack	38	20	52.6%
Two previous attacks	10	6	60.0%
Location			
Anterior	152	41	26.1%
Posterior	84	28	33.3%
Unknown	30	19	63.3%

TABLE II. SEX AND AGE OF PATIENTS

	Male	Female
Total cases	188 (70.6%)	78 (29.2%)
Deaths	52	36
Mortality	27.1%	46.1%
Average age		
First coronary	55.4	61.2
At death	61.0	65.0

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Presented at Staff Meeting, Butterworth Hospital.

TABLE III. RELATIONSHIP OF ANGINA PECTORIS TO MORTALITY RATE

	Cases	Deaths	Mortality
Angina for longer than one month	122	30	24.6%
No angina or for less than one mo.	144	58	40.3%

Detroit but is in close agreement with the series reported by Mintz and Katz[12] from Chicago. Those patients in whom the exact site of the infarction was undetermined had a mortality rate of 63.3 per cent. This can be explained by the fact that many of these patients died before complete electrocardiographic studies could be done, many of them had massive infarction involving portions of the anterior, posterior and septal regions of the heart and most of them were admitted after they had suffered their second or third attack making localization on the electrocardiogram unreliable.

As can be seen from Table II the ratio of male to female was 2.4 to 1, which is in agreement with most of the other reported series. Smith et al[14] from Detroit reported a higher ratio of 4.4:1 but Billings et al[1] from Nashville reported a ratio of 2.7:1 and Mintz and Katz[12] in Chicago reported a figure of 2.2:1. The mortality rate for females was somewhat higher than that for males and the average age for females was higher than males both at the time of the first attack and at the time of death. (Table II)

That anastomosis occurs between branches of the coronary arteries was shown conclusively by Gross.[7] The subject has been lately reviewed by Blumgart.[2] Lowe[10] discussed the dynamic equilibrium that prevails between the vascular fields and showed that "tying off one branch diverted a gelatin solution into other channels which more or less completely inject the fields of the occluded vessel." The usual twenty-four-hour mortality rate following experimental occlusion of the anterior descending coronary vessels of dogs is 50 per cent. Harris and Hokernot[8] have shown that if the occlusion is accomplished gradually over a period of thirty minutes, thereby allowing anastomotic vessels to dilate, death does not occur. Clinically one would expect to see the same beneficial effect in patients having widely dilated anastomotic vessels prior to occlusion. Prolonged coronary insufficiency with angina pectoris should theoretically be an excellent stimulus for the dilatation of anastomotic vessels as well as the stimulus for the development of new collateral vessels. This theory gains support from our statistics. As can be seen from Table III, 46.3 per cent of the patients had complained of anginal pains for one month or longer before actual infarction occurred and 53.7 per cent gave either no history of angina or had angina for less than one month before infarction occurred. The mortality rate in the first group was 24.6 per cent and in the second group 40.3 per cent.

In comparing the mortality rates of patients receiving anticoagulants and those not receiving these drugs it was felt that all patients dying within the first tweny-four hours should be eliminated. Most of these died before anticoagulants could be given and hence would have to be included in the untreated group, unjustifiably raising the mortality in this group. Actually most of these patients died on the way to the hospital, in the emergency room, or within the first hour or two after admission. There were thirty-two such patients comprising 12 per cent of the total. Subtracting these leaves 234 patients for comparison. These patients were divided into four groups: Group I—no anticoagulants; Group II—dicumarol alone; Group III—dicumarol plus heparin; Group IV—heparin alone.

In cases where dicumarol was used, 300 mg. was given on the first day, 200 mg. on the second day and daily dosage thereafter was based on the prothrombin times. Prothrombin times were reported both in seconds and per cent of normal. The thromboplastin employed was standardized daily on normal plasma but dilutions were not done. The thromboplastin employed was a commercial preparation from Chilcott Laboratories marketed under the trade name Simplastin. Any thromboplastin giving values below fifteen seconds or above twenty seconds when used with normal whole plasma was discarded. For full therapeutic effects the prothrombin time was kept between 25 and 50 per cent of normal and it was felt that both safe and satisfactory therapeutic results were obtained at these levels. When heparin was employed, Depoheparin® was routinely used and given in sufficient dosage to keep the Lee-White coagulation time at two times its pre-treatment level.* When this substance was used in the Group III patients, it was given only until the dicumarol had resulted in a

*Depoheparin® is marketed by the Upjohn Company in two forms—with and without vasoconstrictor. Only the depoheparin without vasoconstrictor was employed. This substance gives a prolonged action. Each 1 cc. contains heparin sodium 200 mg., gelatin 180 mg., and dextrose anhydrous 80 mg. The preservative used is sodium ethyl mercuri thiosalicylate 1:10,000).

TABLE IV.
MORTALITY RATES OF PATIENTS RECEIVING NO ANTICOAGULANTS, THOSE RECEIVING DICUMAROL ALONE, THOSE RECEIVING DICUMAROL AND HEPARIN AND THOSE RECEIVING HEPARIN ALONE.

	Total	I	II	III	IV
Number of cases	234	89	95	43	7
Deaths	56	34	13	7	2
Mortality rate	23.9%	38.2%	13.6%	16.2%	28.5%
Autopsies	32	20	5	5	2
Autopsy percent	57.1%	60.0%	35.7%	71.4%	100.0%

fall of the prothrombin time to therapeutic range. This usually occurred on the third to fourth day of therapy.

Table IV gives an over-all mortality of 23.9 per cent. It can readily be seen from this table that there is a significant reduction in mortality between the untreated and treated groups from 38.2 per cent in Group I to 13.6 per cent in Group II and 16.2 per cent in Group III. It will also be noted that the difference in mortality between Groups II and III are insignificant. These statistics agree closely with those reported by Smith, Keyes and Denham[14] and point to the conclusion that dicumarol alone is as efficacious as dicumarol and heparin in combination. This upholds the belief of many writers[5,6] that when coronary occlusion reaches the attention of the physician it has already occurred and an infarct is already present. In many cases it has been present several hours or days. Whatever part the coagulability of the blood has played in this occurrence is done and over. It does not seem reasonable that any anticoagulant drug could effect a change in what is already an accomplished fact. There is no convincing evidence that thrombosis of the coronary vessel increases or propagates. Foord[4] showed at autopsy that the thrombus is only a matter of several millimeters and the evidence is against propagation.

There were only seven patients included in Group IV. In these cases heparin was given throughout the first three weeks of illness and in two cases through the first four weeks.

The high mortality rate (28.5 per cent) is probably misleading and should be disregarded. These patients were given heparin because of persistent nausea and vomiting, precluding the use of oral medications such as dicumarol. They were the most critically ill patients when first seen and a higher mortality rate could be expected.

An analysis of the causes of deaths by groups reveals that the reason for the marked fall in mortality was due primarily to a decrease in fatal thromboembolic phenomena. It will be noted from Table V that approximately 50 per cent of all deaths in Group I were due to thrombus formation (pulmonary emboli, cerebral thrombosis or embolus and recurrent coronary thrombosis) while only 22 per cent of Group II and 14.3 per cent of Group III were due to these causes. There were seventeen patients in Group I, three patients in Group II and one patient in Group III whose deaths could be ascribed to thromboembolic manifestations. It is of added significance to note that of the three patients dying in Group II of thromboembolic complications, one had a prothrombin time at the upper limit of therapeutic effectiveness at the time of death. The level in this patient on the day of death was thirty seconds. The normal for that day was fifteen seconds and per cent of normal was therefore fifty. In one of the two remaining patients dicumarol had been temporarily stopped on the thirteenth postcoronary day because of gastric distress. This patient had a recurrent coronary thrombosis on the seventeenth day of his illness, four days after cessation of dicumarol therapy. We can say, therefore, that only one death occurred from thromboembolic phenomena while adequate dicumarol control was maintained. This accounts for only 7.7 per cent of the fatalities in Group II. When both fatal and non-fatal thromboembolic phenomena were considered it was found that 23.6 per cent of Group I, 6.3 per cent of Group II and 2.3 per cent of Group III showed evidence of peripheral thrombophlebitis, and cerebral, mesenteric, or pulmonary emboli.

Gilbert and Nalefski[5,6] state "the results obtained with dicumarol and heparin so closely approximate those which we have obtained with the xanthine series, that the question arises whether or not the results obtained with the anticoagulant drugs are not due to some effect other than their anticoagulant action." Utilizing a Morawitz-Zahn cannula which was inserted itno the coronary sinus of dogs they measured the variations in blood flow following injections of theobromine sodium acetate, heparin and dicumarol. Theobromine sodium acetate resulted in a 180 per cent increase, heparin a 77.6 per cent increase and dicumarol a 116.5 per cent increase in blood flow. It was their conclusion that the beneficial results of anticoagulants are due to the increase in coronary blood flow. In this series vaso-dilating drugs (papaverine, aminophyllin, et cetera) were employed in only a few cases in both

TABLE V. CAUSES OF DEATH

Group	Hemorrhage	Pulmonary Embolus	Congestive Failure	Cerebral Thrombus or Embolus	Abnormal Rhythm	Recurrent Coronary	Ventricular Rupture	Cerebral Hemorrhage	Secondary Infection	Unknown
I	1 2.9%	13 38.2%	7 20.6%	2 5.8%	4 11.7%	2 5.8%	2 5.8%	1 2.9%	1 2.9%	1 2.9%
II	1 7.7%	2 15.4%	3 23.1%	0 0	3 23.1%	1 7.7%	1 7.7%	0 0	0 0	2 15.4%
III	0 0	1 14.3%	4 57.1%	0 0	0 0	0 0	1 14.3%	0 0	1 14.3%	0 0
IV	0 0	1 50%	1 50%	0 0	0 0	0 0	0 0	0 0	0 0	0 0

TABLE VI. NON-THROMBOEMBOLIC DEATHS.

Group	Total Number of Cases	Deaths Not Related to Thrombi	Mortality
I	89	17	19.1%
II and III	138	16	11.5%

TABLE VII. HEMORRHAGIC PHENOMENA

Group	I	II	III	IV
Fatal Percent	1 2.2%	1 1.05%	0 0	0 0
Nonfatal Percent	2 1.1%	6 6.3%	1 2.3%	1 14.3%
Total Percent	3 3.3%	7 7.3%	1 2.3%	1 14.3%

the treated and untreated groups. If dicumarol is considered to have vasodilating properties, we can consider Groups II and III to have received a vasodilator and Group I to have received none. Comparing these groups further it is interesting to note that after all deaths due to thromboemboli are discarded the mortality rate in Group I is 19.1 per cent and in Groups II and III is 11.5 per cent (Table VI). This would suggest some additional favorable effect resulting from dicumarol therapy and in view of the experimental findings by Gilbert and Nalefski might lead one to base this decreased mortality on increased coronary blood flow.

Fatal bleeding occurred in only one patient in both groups II and III, giving a mortality of 0.7 per cent in all patients receiving dicumarol (Table VII). At the same time there was one case of fatal bleeding in the control Group I for a mortality rate of 1.1 per cent. Both fatalities were due to massive gastro-intestinal hemorrhage and in both patients bleeding was demonstrated from a sclerotic artery in the base of a duodenal ulcer. There was no significant difference in non-fatal hemorrhagic phenomena occurring in the treated and untreated groups. The rate of minor bleeding in the various groups was 2.2 per cent in Group I and 5.8 per cent in Groups II and III. It is of interest to note that of the seven cases of non-fatal bleeding in Groups II and III all but two had prothrombin times at or below the recommended level of 25 per cent. Levels at the time of bleeding were 22, 5, 20, 23, and 26 per cent of normal. The two above 25 per cent were both 30 per cent at the time of bleeding. One of these had moderate bleeding from external hemorrhoids which had bled on occasions prior to dicumarol therapy. The other patient had moderate bleeding from the cervix lasting two days. This patient, prior to this time, had had no cervical bleeding since her menopause eight years before.

Conclusions

1. There is a definite and statistically significant reduction in mortality in patients suffering from acute coronary thrombosis and myocardial infarction when treated with anticoagulants.

2. There was no significant difference in mortality rate between patients receiving dicumarol alone and patients receiving both dicumarol and heparin (Depoheparin®).

3. The marked reduction in mortality resulted primarily from a reduction in fatal thromboembolic complications.

4. There was a moderate but definite reduction in mortality in non-thromboembolic deaths in the treated group suggesting an additional beneficial effect of dicumarol compatible with increased coronary blood flow.

5. No significant bleeding occurred in patients receiving dicumerol when prothrombin time was kept between 25 and 50 per cent of normal values.

6. Patients with a history of anginal pain preceding the infarction by more than one month had a significantly lower mortality rate than those patients without preceding angina pectoris.

(Bibliography on Page 72)

Re-enforcement of Vascular Grafts with Intestinal Musculature

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VASCULAR surgery, having received a tremendous impetus by the needs of World War II, has made rapid progress in the last decade. The use of heterogenous and autogenous blood vessels for grafts is now a fairly well-established surgical procedure. However, although segments of veins or arteries can be inserted into the vascular tree with good immediate results, the ultimate fate of the graft leaves much to be desired.

If the graft does not thrombose immediately after surgery, it remains patent and receives its blood supply from several sources. The intima derives its nutrition from the blood stream itself, while the adventitial layer revascularizes from the surrounding tissue layer. The medial muscular layer of the graft atrophies in both arterial and venous grafts.

When the graft is placed into the arterial side of the vascular tree, it is subjected to arterial pressure the same time that the atrophic muscle fibers of its media are being replaced by fibrous scar tissue. After several months of continuous pounding of arterial pressure, this fibrous scar tissue stretches gradually, its walls thin out and dilate, and an aneurism is formed. Most vascular grafts, subjected to normal arterial pressure, will be dilated within two years of surgery. This has led the authors to search for a means of supplying vascular grafts with a covering of living smooth muscle with its blood and nerve supply intact. The intestine, with its abundant blood and nerve supply and its proximity to the great vessels, was the logical place to investigate.

Methods and Procedures

Healthy dogs, weighing 10 to 13 kilograms, were used in this experiment. Each animal was placed on a fluid diet for twelve hours preceding surgery. The anesthetic used was intravenous sodium nembutal (Abbott), 1 cc. per 2.5 kgm. of body weight. Tincture of mercresin was applied to the abdomen after it had been shaved, and the animal was draped for a laparotomy.

The abdominal cavity was entered through a midline incision from the xyphoid to the pubis. The peritoneum lateral to the descending colon was incised and the colon, small bowel and kidney were retracted medially, exposing the abdominal aorta and its branches. A segment of the aorta was dissected free from the trifurcation of the aorta cephalad for approximately 4 to 5 cm. All tributaries leaving the aorta were ligated and divided between ligatures, thus freeing the abdominal aorta.

A segment of the aorta, approximately 2.5 cm. long, was removed after being occluded above and below with bull-dog clamps. This segment was reversed to insure complete destruction of the blood and nerve supply and reinserted, using a 4-0 running silk suture.

At this point it was necessary to relieve the peripheral vasospasm produced by occluding and manipulating the aorta. Thrombosis occurs at the site of the graft if this vasospasm is not relieved. One of two procedures can be done. Etamon (Tetraethylammonium chloride, Parke-Davis), 2 cc. intramuscularly, can be administered or a bilateral sympathectomy can be done.

The Etamon is used to produce a ganglionic block and is administered three times daily until stiffness in the hind legs disappears. Average duration of treatment required is three to seven days.

If a bilateral sympathectomy is used, the chain on the left is readily removed at the same time that the graft is done since it is in the operative field. The right side can be removed by incising the mesentery lateral to the ascending colon and retracting it medially. Several branches of the inferior vena cava have to be divided between ligatures in some of the animals in order to adequately expose and remove the lumbar sympathetic chain on the right.

To re-enforce the graft a segment of the ileum about one and a half inches long, with one of the large arcuate arteries supplying it, is transected. The two ends of the ileum are reunited using a side-to-side or end-to-end anastomosis. A two-layer suture technique is used.

The section of small bowel to be used as the muscle covering for the vascular graft is incised

From the Research Department of the Upjohn Company, Kalamazoo, Michigan, and the Research Laboratory, Harper Hospital, Detroit, Michigan.

longitudinally along its antimesenteric border, producing a square or oblong surface. The mucous membrane is dissected off to obtain the smooth muscle layer containing its own blood and sympathetic nerve supply. If this is done in the proper plane, the layers separate easily with a minimum of bleeding.

The denuded area of bowel is passed through a small hole made in the peritoneum, which has been placed near the graft at the base of the mesentery, where it will not endanger the blood supply of the transplant. The transplant is placed about the blood vessel graft and trimmed down to proper size. It is sutured in place with silk sutures. The peritoneal incisions are closed and the abdomen is closed in layers.

The entire procedure takes sixty to ninety minutes' operating time, depending upon whether or not a lumbar sympathectomy is done.

Postoperatively picrotoxin is given as a stimulant. During the first twenty-four hours after surgery, the animals receive 250 to 500 cc. of 5 per cent glucose in water subcutaneously. They are given 1 to 2 cc. of penicillin intramuscularly every day.

Discussion

In this series we have proven to our satisfaction that it is technically feasible in animals to use a segment of the small intestine to re-enforce a vascular transplant.

The animals have not been observed for a long enough period to determine whether or not this transplanted intestinal smooth muscle will prevent aneurism formation.

We do not know as yet how this transplanted muscle reacts when the intestine is stimulated. Data on this aspect of the problem are being gathered and evaluated. The transplant reacts the same way as the intact gut to mecholyl and Etamon administered intravenously when observed at exploratory laparotomy.

This procedure can be performed as a single operation or it can be done in two stages. The vascular transplant and sympathectomy can be done as the first stage and the intestinal transplant as the second stage.

Conclusions

1. It is technically feasible to use the smooth muscle of dog intestine with its mucous membrane removed, but its nerve and blood supply intact, as a living median and an adventitial layer in transplanted blood vessels.

2. A new field of surgery upon the aorta and the great vessels would be opened if the application of this procedure proves to be practical.

SIMPLIFIED TECHNIQUE FOR WIRING ANEURYSMS

(Continued from Page 61)

stainless steel wire is manually fed into the aneurysm until the first loop is made. The dental burr is then applied perpendicular to the wire exposed through the notch. Setting the machine in motion causes the wire to be fed rapidly into the aneurysm. Since the burr is rough it not only feeds the wire through the needle, but also notches the surface of the wire.

To illustrate the speed and ease with which an aneurysm may be wired, we briefly present a case.

Case 1.—A sixty-one-year-old white man, with active right upper lobe tuberculosis demonstrated multiple aneurysmal dilatations of the ascending aorta on chest x-rays. One of these presented just above the suprasternal notch. (Fig. 2.) The first attempt at wiring was in a more conventional manner and was done percutaneously through a No. 20 spinal needle using cervical block anesthesia. A No. 32 gauge stainless steel wire was fed through this needle manually. Approximately 300 feet of wire were fed into the aneurysm in five hours' time (Fig. 3-a). The patient was sent to his room but subsequent examination revealed that the mass in the suprasternal notch was still pulsatile and enlarging. It was felt that further wiring was indicated and to accomplish this the apparatus and technique described were used. In fifteen minutes' time a 300 foot length of No. 30 stainless steel wire was fed into the aneurysm and it ceased pulsating. (Fig. 3-b and c).

In conclusion, we feel that this is a simple method of accomplishing what was previously a more formidable procedure both for the patient and the surgeon.

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Cat-Scratch Disease

By Edward L. Quinn, M.D.

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THE NEWLY described clinical entity, Cat-Scratch Disease,[3] is characterized by a localized glandular involvement, frequently related to a cutaneous lesion at the site of a scratch inflicted by a cat. The regional adenitis may proceed to suppuration, with formation of bacteriologically sterile pus, or it may resolve spontaneously without suppuration. Fever and malaise are moderate to absent. Diagnosis is established by a specific skin test with an antigen prepared from the pus from the lymph node of a typical case. Such a case is the subject of this report, the first such case to my knowledge in this area.

Case Presentation

Case 1.—A. M., aged sixteen, owned two playful cats which frequently scratched and bit her. Two weeks prior to examination, the patient abruptly developed swelling at the angle of the jaw on the right side. For the same length of time, she had a small indurated skin ulceration over the zygoma on the right which she attributed to a cat scratch. Neither lesion changed appreciably in size or in tenderness or in appearance during the two-week observation. She was not aware that she had had any fever and had otherwise felt perfectly well. The first clinician who saw her suspected tularemia.

Examination at the Henry Ford Hospital, January 12, 1952. (Fig. 1A) revealed an elastic, non-tender, moderately enlarged gland (2 x 3 cm.) at the angle of the right jaw. Over the right zygoma there was a non-tender, short, linear, crusted ulceration with mild erythema about it. Smears and culture of a drop of sero-purulent material from the skin lesion were bacteriologically negative. The temperature was normal and the physical examination otherwise essentially negative.

Complete blood count was normal and tularemia and brucella abortus agglutination were negative.

Terramycin, 500 mg. four times daily for seven days, was administered during the third week of the disease, with regression of the lymphadenitis by about 50 per cent, and with almost complete disappearance of the skin lesion. The size and elastic character of the enlarged node then remained unchanged. A lack of fluctuation led to postponement of surgical drainage and the institution of a second course of Terramycin during the fifth week of the illness. Gradual improvement ensued and by the end of the eighth week (Fig. 1B) of illness the lesions had entirely regressed.

From the Department of Medicine, Infectious Disease Division, Henry Ford Hospital, Detroit, Michigan. Presented at the Henry Ford Hospital Medical Association Biennial Meeting, May 9-10, 1952.

Through the courtesy of Dr. Worth B. Daniels and Dr. Frank G. MacMurray, Washington, D. C., who furnished us with some antigen made from a typical case of cat-scratch disease, an intradermal test was applied four months after the onset of the disease. After forty-eight hours this showed a minute papule, 3 to 4 mm. diameter, with a surrounding zone of erythema. The clinical picture and the positive skin test makes the diagnosis of cat-scratch disease virtually certain.

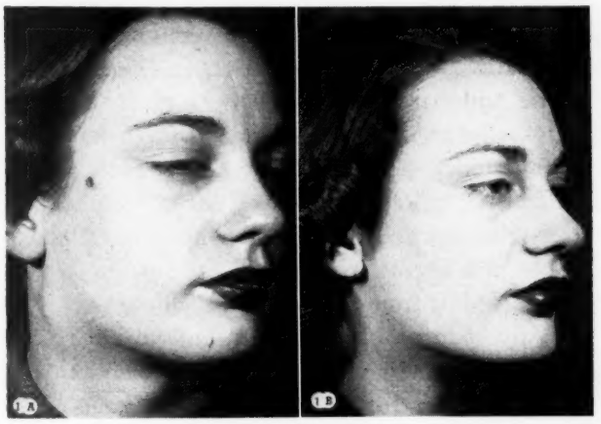

Fig. 1.

Discussion

Historically, the first case of cat-scratch disease was published in January, 1950, by Debre, of Paris.[3] Dr. Lee Foshay,[4] of Cincinnati, in his studies on tularemia had noted, but had not published, a "score or more" of such cases during the previous twenty years. Dr. Foshay's cases were characterized by sterile pus, negative serologic tests for tularemia, and a positive skin test to antigen prepared from the aspirated pus. This antigen was negative in control subjects.

Debre had visited Foshay in 1947 and realized his cases were similar to the American cases and later proved that they reacted positively to the Foshay antigen as well as to an antigen prepared from his cases in France. Within the year after his publication about 100 cases were reported in France.

In the first American report in October, 1950, Greer and Keefer,[5] described one patient and in May, 1951, Daniels and MacMurray[1] described twelve additional cases.

In April, 1952, Daniels and MacMurray[2] summarized the clinical findings in sixty patients which they had collected in the past year from fifteen states in the United States, Canada and Hawaii. Briefly, in these sixty patients, fifty-five had cat contact; thirty-three had a cat scratch; three had

a cat bite; sixteen were involved in seven household epidemics; suppuration occurred in thirty-three per cent; the lymphadenopathy persisted from two to twenty-six weeks, average six weeks.

Of fourteen batches of antigen prepared, some gave strong and some weak reactions necessitating standardization on a control patient. Pathologically the nodes revealed hyperplasia of the reticulo-endothelial elements, necrosis and epitheloid cells. Sulfonamides, penicillin and streptomycin seemed ineffectual; chloromycetin and aureomycin seemed to shorten the course and prevent suppuration.

The skin test utilizes the principle of the original Frei test. Pus from a typical case, diluted one part with five parts isotonic sodium chloride, is heated at 56°C. for one hour on two successive days. The test is performed by injection intradermally of 0.1 cc. of this material and read in forty-eight hours, a positive reaction being comparable to the tuberculin test.

Search for an etiologic agent[1,6,7] has apparently excluded the known bacteria, fungi, virus and animal parasites and led to the belief that the condition is probably due to an unknown virus. The disease cannot be transmitted to cats and since those cats suspected of having transmitted the disease have negative skin tests, the cat probably transfers the etiological agent only passively. Inoculation by inanimate objects contacted by cats in the absence of cat scratch has been recorded, i.e., thorns and wood splinters. Other assumed means of transmission are injury to the skin by a beef bone, mosquito bite, and laceration while butchering pork.

Positive transmission experiments to monkeys[7] and one of four human volunteers[6] have been recorded. Some serologic relationship to the lymphogranuloma-psittacosis group of viruses is suggested by the complement fixation test, but the Frei test is negative in patients with cat-scratch disease.

Summary

A case of cat-scratch disease from this area is the subject of this report.

Cat-scratch disease should be suspected in any case of unexplained regional lymphadenitis.

Addendum

Since submitting this case report for publication, four additional cases of cat-scratch disease have been seen at the Henry Ford Hospital, three of the cases occurring as part of a household epidemic.

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MYOCARDIAL INFARCTION

(Continued from Page 68)

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University Hospital

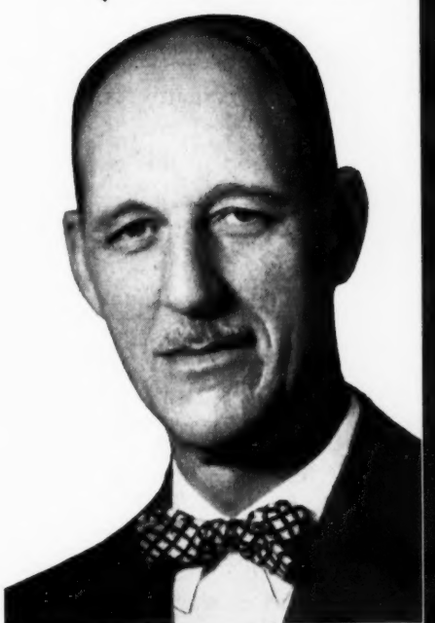
Medicine in the Spotlight

The Clinical Session of the American Medical Association was held in the beautiful city of Denver early in December, 1952. It may be held in Michigan—Detroit—in the not too distant future, if new facilities for housing a large meeting of this kind are developed. But even this mid-year meeting is well attended by over 6,000 M.D.'s and associated individuals so that acting as host is a major undertaking and must be planned well in advance.

These remarks on the physical proportions of this prominent meeting of medicine is symbolic of the fact that our activities, scientific and sociologic, are very much in the public eye. As revealed in an editorial in the *Denver Post,* we are an "embattled profession" and after perhaps a slow start, we have emerged as a formidable foe to socialism, in general, and to centralized government control of medicine, in particular. It seems to be generally recognized that the imminent threat of government medicine is relieved but by no means ended. We have been aided in this and other battles by public opinion, an expression of faith in the free doctor. But we are also reminded that the socio-economic factors in medical care are of immense importance to the patient and to those we must keep attuned.

For one thing, the group surgical, medical and hospital care plans without doubt have aided tremendously in postponing the demand for socialized medicine and therefore merit our co-operation. It is not enough, however, to urge the use of these plans by our patients. We must sell ourselves to participate in them as evidence of our good faith and gratitude for public support. There are, of course, other facets to our efforts in public relations, but they may be more clearly delineated if each of us does the most possible for our patient at all times.

President's Message



R. J. Hubbell

President, Michigan State Medical Society

Editorial

A NEW YEAR—RENEWED PROBLEMS

WITH the dawning of a new year, we are always stimulated to attack new problems and to make renewed efforts to solve old ones. The installation of a new Administration in Washington and a new political alignment of the Congress prompts us to review some projects of the past with a hope of better results in the future.

SELF-ESTABLISHED SECURITY

FREQUENTLY since September, 1945, this editor has invited attention to the failure of our federal laws to give the same preference to professional men as it does to industrial employes. Independently practicing doctors of medicine, attorneys at law, dentists, architects, and others are forbidden the opportunity granted to industrial workers to have a part of their income invested in specified securities or insurance plans whereby up to 15 per cent of earnings may be set aside to furnish an income in later life, after the best earning years are past. This amount so invested is to be exempt from income taxes until it is returned to the investor as annuities or allowances. Something of this nature was attempted by the last Congress under the Keogh-Reed Bills (H.R. 8390 and H.R. 8391).

There is no just reason why professional people should not be permitted to set aside 10 or 15 per cent of their incomes tax-free to purchase certain specially designated government bonds which will mature at the retirement of the purchasing individual. They would thus be allowed to establish estates for their old age, instead of paying most of their income for income taxes. The Government would not lose in the long run, for while it would not collect the percentage of the income as it was being earned, the Government would get the use of the whole investment for the years pending retirement. That could be at a very small interest rate, if the Congress so specified. As the accumulations are being paid back to the investor, he would necessarily be required to pay income taxes, either at his newly established rate, or if Congress should choose, it could establish the income tax as of the rate in force when the trust was set up.

OLD AGE SOCIAL SECURITY BENEFITS

ANOTHER federal tax and payment plan which needs attention is the administration of the Social Security old age benefits. The law has been amended several times. At first a beneficiary drawing on his Social Security got $15.00 a month. If he earned more than $14.99, he forfeited all benefits. That law was changed, making the benefits $50.00 per month, still retaining the forfeiture clause if the conscientious citizen tried to eek out a living for himself by supplementing the meager allowances given by the law. Many such persons were summarily removed from the rolls and kept off for indefinite periods.

Later, the law was amended so that if a person is over seventy-five years of age and still able to do a little work, he may do so without forfeiting his benefits. Recently, the allowances have been increased, until the maximum is about $80.00 a month, with half that amount for the spouse, if alive.

The Government claims this Social Security is a true and adequate insurance proposition, and that on the average a man who has been under the plan for a minimum of an indefinite number of years will have paid into the Treasury of the United States enough to carry his benefits for the rest of his life. If that is true, there is no excuse or justification for the Government to deny any beneficiary his benefits, because he has been willing and able to earn a little extra money in his old age and compulsory retirement.

These old people did not ask to be taken out of their regular employment. The very fact of their willingness to continue paying their own way, in so far as they are allowed, testifies to their worthiness. Thoughtful attention is their due from the new powers of government in Washington.

HEALTH SURVEYS

ONE of the projects advocated for a great many years by the medical profession has been the periodic health survey that each individual should undergo. The American Medical Association has advocated such examinations as long as most of the present practitioners can remember. Industry adopted the plan to its advantage.

One of the mainspring projects of the Michigan State Medical Society during the year just past was the "Formula for Freedom." It had three fundamental elements: "Know Yourself," "Know How to Live," and "Know Your Government." Many county and district assemblies have been held to develop and spread the program throughout the State. The first topic, "Know Yourself," was broken down into two parts: (1) (a) Periodic Health Appraisal, (b) Social-Religious Appraisal, (c) Economic Appraisal, (d) Legal Appraisal; (2) Joint effort by all voluntary health organizations to emphasize in their educational and promotional efforts the importance of the general health of the complete individual as opposed to the emphasis on a single examination for a specific disease. To this tenet the Michigan State Medical Society has been pledged.

The older members of our profession will remember that at the close of the first World War President Woodrow Wilson made a tour of the United States urging support of his proposed Treaty of Peace with the Central Powers, which would set up a League of Nations. During that trip he was stricken with an illness which prevented him from meeting with his cabinet and carrying on the functions of government. He did sign papers, but all contacts were by and through his wife. In effect, she was the President for about a year of Wilson's second term. He never regained his health.

Only a few years later, President Warren G. Harding made an exhausting trip through the Northwest, including Alaska, and died soon after returning to the West Coast. He had a "heart attack." Possibly he should not have made that trip.

President Franklin D. Roosevelt ran for the fourth term after his personal physician, a Navy admiral, had assured the American public that he had made careful examination of the President and could testify that the President was in sound health. Actually, he was a dying man, and passed away only a short time after his inauguration.

Another President's term is drawing to a close; in fact, it will be ended when this editorial appears in print. All have watched this President's progress through the past seven years, and in the recent ones some have wondered what the state of his health might be. He has seemed always to have an answer to every problem, no matter how big; he has not taken well to advice, or sought advice in many instances when he should. His term is over, and another is just beginning. We therefore cannot be charged with politics, if we make a suggestion.

There is no provision in our government for carrying on the functions of the Presidency in case the President is incapacitated temporarily. Many people believe there should be a periodic appraisal of the President's health. This should not be made by a politically appointed or selected medical man. The regular care of the President's health is his own personal privilege, and he is entitled to his own private physician, be he an officer of the Army, Navy, or a civilian. There is an element of personal or political bias in that selection. That is the President's right as a free citizen.

But the President is not a free citizen, insofar as he is President of the United States. He owes his best service to the people of this country. Some plan should be set up by Congress providing for an independent non-political, appointment-free commission which shall periodically and at sufficiently frequent intervals make a thorough study of the President's health, mental and physical, to determine whether he is able and capable to carry on his arduous work. If found sound, the Commission shall so report; if found temporarily incapacitated, his duties could temporarily be assumed by the Vice President. If found permanently disabled, some provision should be made for an independent confirmation of that finding, in which case the Vice President should take over.

This is a ticklish problem, and will challenge the Congress for a satisfactory adjustment.

This suggestion, or one of a similar nature, is a just and immediate need. The duties of the Presidency have increased to such a great extent that a man of iron is needed. Too many of our Presidents in these later years have suffered from human frailties that might have been tempered by just and adequate attention to the needs of a human being.

The President is a living symbol of our government, and essential to the proper function of the government. We must protect his health, and also protect ourselves from the dangers which might develop if the burdens should prove too great.

This editorial suggestion has been postponed for a long time, until it could be written without the implication of a political slant. That cannot be the case now. Our new President, with his military background, is perfectly familiar with the need of periodic check-ups.

Heart Beats

Frank N. Wilson—In Memoriam

By Franklin D. Johnston, M.D.
Ann Arbor, Michigan

In thoughtful tribute the Michigan Heart Association, upon invitation of the Michigan State Medical Society, dedicates this Annual Heart Number of THE JOURNAL *to one of Michigan's outstanding men of medicine—Frank N. Wilson, M.D.*

The death of Frank N. Wilson, M.D., on September 11, 1952, brought to an end the career of a great scientist, teacher and physician. It is quite proper that this Number of THE JOURNAL be dedicated to this man who did so much in his chosen field. He not only brought distinction to himself but added immeasurably to the reputation of medicine in this State and to that of the University of Michigan Medical School.

He was born near Detroit, Michigan, on November 19, 1890, and except for two short periods of service at Washington University in St. Louis, Missouri, before and after the first World War, resided in Michigan all of his life. Soon after graduation from the University of Michigan Medical School in 1913 he was encouraged by the late A. W. Hewlett, M.D., then head of the Department of Internal Medicine in University Hospital, to begin the study of electrocardiography. He soon became completely absorbed in this work, and as time went on electrocardiographic research occupied more and more of his intellectual life. Research to Doctor Wilson was never an activity which one turns on as they enter the laboratory and switches off on leaving for home.

When Doctor Hewlett left Ann Arbor in 1916 to take a position at Leland Stanford University, Doctor Wilson accepted a post at Washington University, in St. Louis. In the spring of 1917 he entered military service and was assigned to work with Sir Thomas Lewis at Colchester, England. The unit at Colchester was established to study effort syndrome occurring in British soldiers and, during the two years that Doctor Wilson served with this group, lasting friendships began with Sir Thomas and several American, British and Canadian physicians. Of the other Americans in the Unit, Doctor Wilson became especially attached to Samuel A. Levine, M.D., and they became very close friends. Sir Thomas recognized the great ability of Doctor Wilson and singled him out for special instruction and attention. Not only were technical subjects including electrocardiography discussed by these two great men, but lighter matters like the study of birds and their photography were interspersed. Doctor Lewis was an expert in ornithology and gave to Doctor Wilson much of the interest and enjoyment in this hobby which remained with him ever after.

To Michigan in 1921

Upon his return to the United States in the fall of 1919, Doctor Wilson resumed work in St. Louis and soon was engaged with George R. Herrmann, M.D., in an important experimental study of bundle branch block and electrocardiographic and pathologic observations in patients with ventricular hypertrophy. Some of this work was not finished and the reports were not published until after 1921 when Doctor Wilson returned to Ann Arbor as Associate Professor of Internal Medicine. At this time, the present University Hospital was being built and the Heart Station was designed and equipped in accord with Doctor Wilson's wishes and advice. When the Hospital was completed in 1925, good equipment and adequate space were available to Doctor Wilson for the first time. A large electrocardiograph employing a string galvanometer was mounted permanently in the main work room in the Heart Station and for over ten years most electrocardiograms taken on in-patients were obtained over the extensive wiring system that connected all parts of the Hospital with the Heart Station. This somewhat unique arrangement

worked well for a time, but progressive difficulties arose, so in 1936 a mobile electrocardiograph was purchased and the use of the wiring throughout the Hospital was largely abandoned.

As a result of a long period of negotiation and much correspondence between Doctor Wilson and the great Dutch physicist, Wilhelm Einthoven, a large double string galvanometer with the two units in tandem was available soon after the Heart Station opened. This fine piece of equipment, designed by and constructed under the supervision of Doctor Einthoven, made possible many important clinical and experimental studies carried out by Doctor Wilson and his associates during subsequent years.

Routine clinical work took a great deal of Doctor Wilson's time for several years after his return to Ann Arbor in 1921, but following an illness that lasted for nearly two years in the late twenties he requested relief from much clinical responsibility and entered the most productive period of his life. While Doctor Wilson was ill a very important electrocardiographic study was carried out by Doctors Paul S. Barker, A. G. MacLeod and John Alexander, which included, among other things, the registration of premature beats produced by stimulation of accurately located points on the exposed human heart. This work made Doctor Wilson realize that the long accepted ideas about bundle branch block were probably incorrect, and he promptly carried out beautiful experimental and clinical studies which proved beyond question that tracings previously considered to be due to right branch block were actually due to left branch block and vice versa. It is of considerable interest that, in the course of this work, multiple precordial leads were systematically used for the first time in man.

First Described the Ventricular Gradient

At nearly this same time Doctor Wilson devised the central terminal circuit for the registration of "unipolar electrocardiograms," and shortly thereafter described an entirely new and important concept, that of the ventricular gradient. Although both of these studies are of much theoretical interest, the former has proved to have great practical value as well. The central terminal arrangement is the basic circuit nearly universally used in taking "unipolar electrocardiograms" as we know them today. This work was followed by clinical and experimental electrocardiographic studies on myocardial infarction. Although many details have been added by others, a great deal of the basic knowledge we possess in this important field stems directly from Doctor Wilson's early work. Many of his later investigations and papers were devoted to the use of the precordial electrocardiogram and other special leads but there is hardly any corner of electrocardiography that has not been enriched and clarified by his genius.

Doctor Wilson wrote over one hundred papers, mostly on the electrocardiogram, but his contributions as a teacher were of even greater value. For nearly twenty years, he gave an annual postgraduate course in electrocardiography which attracted doctors of medicine in increasing numbers to Ann Arbor. In addition to this formal course, a great many physicians from all over the world spent varying periods of time in the Heart Station studying under Doctor Wilson. Although this informal type of instruction took a great deal of time, which he would have prefered to use in other ways, he seldom said "no" to a doctor of medicine who wished to work in the Heart Station. In all his teaching Doctor Wilson emphasized the many things apart from heart disease that may influence these electrical records, and he did a great service to physicians and patients by insisting on an intelligent and conservative attitude in their interpretation.

A Physician's Physician

Many practitioners in Michigan remember Doctor Wilson not as an expert in electrocardiography but as a skilled physician who helped them in the care of their cardiac patients. He used the same fundamental approach in studying patients as he did in his electrocradiographic work and was often able to suggest a diagnosis or treatment which had not occurred to the attending physician. Many of these doctors of medicine came to Doctor Wilson for professional advice themselves and in his later years he was truly a physician's physician. He always took the time to inquire into the details of the history and to do a careful and complete examination. After the examination was finished he invariably talked the problem over with the patient and regardless of the nature of his opinion his calm and kindly attitude always brought reassurance and confidence.

Chronic illness forced Doctor Wilson's retirement from active work in the Heart Station in Novem-

(Continued on Page 110)

THE MICHIGAN HEART ASSOCIATION, since its organization in 1949, has allocated more than $276,000.00 for fifty-five research projects in the field of cardiovascular disease. This important work has been conducted in eight medical institutions located in four different medical areas of Michigan. In addition to comprehensive research projects in the basic sciences, exhaustive studies have been made in the clinical application of newer therapeutic and diagnostic measures. The intensive research supported by the Michigan Heart Association, with funds received from the United Health and Welfare Fund of Michigan and the Torch Drive in Detroit provides a more hopeful outlook for all cardiac patients.

THE MICHIGAN HEART ASSOCIATION has provided financial support for the development of Education and Community Service programs. The success of these programs is reflected in the more than 5,000 examinations performed in the Michigan State Medical Society's Rheumatic Fever Centers; the more than 600 women who attended the Cardiac Housewife Classes; the studies in Industrial Cardiology; the expanded professional education program for Michigan physicians with the latest scientific advances in the cardiovascular field, and the effective public education program, planned to provide the people of Michigan with pertinent, up-to-date information about heart diseases.

Michigan Heart Association

Summary Report on Research Project, 1951-1952

One of the chief aims of the Michigan Heart Association is to stimulate and support research in cardiovascular diseases. Its other important responsibilities are in the fields of Education (professional and public) and Community Service.

The following are reports of progress made during the fiscal year 1951-52 by investigators working in Michigan under the sponsorship of the Michigan Heart Association through funds received in "United" campaigns.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—GORDON B. MYERS, M.D. $23,200.00

This is a continuation of previous work which has now crystallized into three main channels and is being continued in 1952-1953 as individual grants to the investigators named below under the over-all supervision of Dr. Gordon B. Myers.

(a) LLOYD T. ISERI, M.D.—"Metabolic Aspects of Cardiorenal Diseases."

Six scientific papers have been written and published, including one in the Heart Issue of THE JOURNAL MSMS of December 1951. One additional paper is in press and a paper dealing with Sodium and Potassium Metabolism in salt-losing nephritis has been submitted for publication. The data for seven cases studied completely for water, potassium, and chloride indicate a slight but constant decrease in water, a distinct increase in potassium, a distinct decrease of chloride content of muscle tissue after compensation of congestive heart failure. These data were obtained by muscle biopsy studies and are being continued with the hope that there will be more conclusive data with regard to sodium as well as to potassium and chloride.

(b) HARPER K. HELLEMS, M.D.—"Hemodynamic Aspects of Cardiorenal Diseases."

Using the technique of the cardiac catheter, the role of vasomotor activity in the control of the pulmonary circulation has been studied in thirteen dogs. Various vasomotor drugs are being studied to determine if vasomotor control of the arterioles plays any role in the pulmonary circulation. In addition, patients with sickle cell anemia have been studied to determine the nature of the cardiac pathology observed in these patients. It was found that arterial oxygen saturation was at low levels in each of the eleven patients studied. This unexpected finding is being further pursued in the attempt to unravel this still incompletely understood disorder.

Preliminary work in developing techniques of measuring myocardial blood flow and metabolism have been worked out. During the coming year, the major effort of the laboratory will be devoted to this problem.

In addition to the above experimental work, studies and follow-up of patients who have had mitral valve surgery are continuing on the twenty patients who have been operated on to date.

A manuscript on this topic has been accepted for publication in S. G. & O. Two other manuscripts are in preparation for publication. Two papers have been presented: one at the American Heart Association meeting in Cleveland and the other to be presented at the Regional Meeting of the College of Physicians. It has been found that there is a good correlation between increase in the calculated mitral valve size following surgery and clinical improvement. The data also suggests that some patients undergoing this surgery may reclose their mitral valves. These patients have shown a relapse following transitory improvement. This work will be reported at the Fourth Annual Michigan Heart Day, March 13, 1953.

(c) ALBERT J. BOYLE, M.D.—"Chemical Aspects of Arteriosclerosis and Cardiorenal Diseases."

Five new articles have been published or accepted. The work to date shows a relationship between clotting time of plasma and turbidity appearance of serum when certain chemical elements are added. In addition, there were found marked differences between the time required for turbidity appearance in samples from arteriosclerotic as opposed to normal subjects. This time difference may be directly related to particle size of serum proteins. New methods of chemical analysis of various blood salts have been developed, also a procedure for estimating chelating agents in the urine which will be used in the animal study of arteriosclerosis.

HARPER HOSPITAL—F. D. DODRILL, M.D. $6,000.00
"Mechanical Heart-Lung Mechanism"

During the year, seventy-six animal experiments have been carried out substituting the mechanical heart-lung mechanism for the right heart, for the left heart, and for both ventricles using both the natural lungs and an artificial oxygenating machine. On the left side, the mitral valve has been exposed in the living animal; and in the last eight exposures, all animals have survived.

A publication dealing with original observations on this problem will appear shortly. Dr. Dodrill will speak on this subject at the next Heart Day, March 13, 1953.

It would appear from the experimental work that application of the artificial heart-mechanism to human surgery may be in the near future.

UNIVERSITY OF MICHIGAN—James L. Wilson, M.D. $6,000.00

"Investigation of the Effects of Cyanotic Heart Disease and its Relief on Cerebral Function"

This is a continuation of the investigation of congenital heart disease and particularly of the mental improvement resulting from surgical correction. During the year, 125 new patients were seen. Certain of these were added to the group under study for the effects of chronic cerebral anoxia associated with the cyanotic (blue baby) heart conditions and its relief through appropriate cardiac surgery. A remarkable psychic change was seen in those who had successful surgery, having shown an entirely new confidence in their ability to do things, looking as though the weight of the world had been removed from their shoulders. Several of the better surgical results have had a definite rise in their intelligence quotients.

An article was published by Drs. Melvin Figley, Fred J. Hodges, Aaron Stern and James L. Wilson in the last Heart Issue of the State Journal, dealing with the use of angiocardiography as a diagnostic aid in these conditions.

The investigator reported that this grant has been of great value in raising the level of understanding of congenital heart disease, its diagnosis and treatment.

HENRY FORD HOSPITAL—Conrad Lam, M.D. $6,000.00

"Experimental Cardiovascular Surgery"

The following problems have been investigated in the Surgical Research Laboratory of the Henry Ford Hospital:

1. Rectus Sheath Grafts in Vascular Repair: It was found that pieces of the posterior sheath of the rectus abdominis muscle could be used to make tubes or patches for the repair of arteries. This work was reported in a paper to the Central Surgical Association at Toronto, March 7, 1952, and has been published in the *Archives of Surgery.*

2. Sterilization of Arterial Homografts: Several sterilizing chemicals have been investigated to see if they could be used to make routine autopsy specimens useful for implantation when arterial grafts are needed. The agent diacetylethylene was found unsuitable, but very promising results have been obtained with betapropiolactone.

3. Application of the Hathaway Electronic Pressure Recording System to Experimental and Clinical Cardiovascular Surgery: A paper describing the pressure changes in the pulmonary artery and left auricle in thirty-eight patients undergoing surgery of the mitral valve was read at the meeting of the International Society of Surgery in Paris, September, 1951.

4. Efforts to By-pass One or More Sides of the Heart: It was found to be possible to create an anastomosis between the superior vena cava and the right main pulmonary artery, thus shunting blood from the superior part of the body directly into the right lung without passing through the right side of the heart.

5. Experimental Surgery of the Aortic Valves: A paper was published in Surgery, Gynecology and Obstetrics describing the results when aortic valves are grafted from one animal to another. These valves function only temporarily, possibly because the recipient animals did not have permanent insufficiency of their own valves. Further studies of the spontaneous healing of traumatic lesions of the aortic valves are being carried out.

HENRY FORD HOSPITAL—B. E. Goodrich, M.D. $500.00

"Protamine Studies"

This grant was originally approved in August 1949 in the sum of $3,000.00 for the purpose of studying the effect of protamine, such as found in commercial protamine zinc insulin, on the coagulation time of the blood of patients receiving this medication, as well as animal studies. Blood protamine studies were made as well as clotting time during various medications given to diabetic patients. A paper reporting these studies was published in the Journal of Laboratory and Clinical Medicine. Additional studies were contemplated, dealing with the variations in blood clotting mechanism in connection with acute cardiac infarction. An additional $500.00 was allocated for this purpose in July, 1951. Since then there has been almost no activity because of the lack of technical help. Technical assistance has just become available and the studies are being resumed.

UNIVERSITY OF MICHIGAN—Franklin D. Johnston, M.D. $2,500.00

"Special Electrocardiographic Studies and Cardiac Vibrations"

This has been a continuation of the study of low frequency vibrations over the heart. A preliminary report has been published in *Circulation,* April, 1951. In addition, studies of electrocardiographic leads utilizing fluid mappers have been pursued. Preliminary reports of this work were submitted to the Central Society for Clinical Research in October, 1951. A paper on this subject was published in *Circulation,* July, 1952.

Two new techniques have been developed by Dr. Stow, to whom this entire allocation has gone in the form of a salary in his capacity as Research Associate. A switch has been developed to obtain E.K.G. tracings which depict the voltage throughout the 360 degrees of the Einthoven triangle. The other is an electronic circuit to make it possible for the physician to hear low frequency vibrations which are in themselves in the subaudible range. This involves an entirely new method of auscultation, and it may or it may not be of clinical value.

Dr. Johnston presented a paper on the Use of the Electrocardiogram at the Michigan Heart Day in March, 1952.

UNIVERSITY OF MICHIGAN—Sibley W. Hoobler, M.D. $5,400.00

"Pressor Substances in Hypertension"

Increasingly sensitive methods for detecting the presence of substances in the blood which cause elevation in

blood pressure have been perfected. The artificial kidney which was used in this connection was a bulky and complex mechanism. It has now been replaced by a simpler ultra-filter. The detection of pressor substances has been greatly improved by the adoption of a new carotid segment technique, and it has been possible in a few cases to pick up specific constriction activity directly from the blood of patients receiving infusions of small amounts of arterenol. It is expected that real progress will be made in the next few months on this project. The method for measuring vasocative substances was reported by Dr. Wendell Kingsolver at the Spring meeting of the Federal Society for Biology and Medicine and will be published at a later date. Dr. Hoobler presented a paper on "The Modern Drug Therapy of Hypertension" at Heart Day in March, 1952.

CHILDREN'S HOSPITAL OF MICHIGAN—Paul V. Woolley, Jr., M.D. $5,000.00

"Use of ACTH and Cortisone in Rheumatic Fever"

The effects of ACTH and Cortisone on acute rheumatic fever have been observed on a large series of patients. They were reported in a paper read by Dr. Manes Hecht at the Third Annual Michigan Heart Day and will be published in the forthcoming Heart Issue of The Journal MSMS. This work is being continued both on new cases and as a follow-up on cases already treated.

BLODGETT MEMORIAL HOSPITAL — Noyes L. Avery, M.D. $1,000.00

"Use of ACTH and Cortisone in Rheumatic Fever"

One additional patient with rheumatic fever has been studied and follow-up studies have been done on five patients.

HENRY FORD HOSPITAL—Joseph A. Johnston, M.D. $5,000.00

"Nutritional Studies in Rheumatic Fever and Rheumatoid Arthritis"

The metabolism of fifteen subjects were studied by the balance method, some for as long as three months. The observations concerning the first six of these were published in the *American Journal of Diseases of Children.*

The effect of graded exercise in convalescence from rheumatic fever was observed. The nitrogen balance had been negative due in part from inactivity. Small amounts of exercise resulted in increased storage of nitrogen and marked increase in the storage of calcium. There is a useful principle involved here which was demonstrated previously in tuberculosis that carefully supervised exercise in small amounts can be a useful adjunct to offset the disuse atrophy resulting from too prolonged bed rest. Further studies on the total effect of cortisone in rheumatic fever were conducted. Metabolic losses during prolonged administration are quickly regained. In one individual, the net result was a gain in nitrogen in spite of losses during administration of the hormone, something which the author feels is a permanent contribution to growth and ability to cope with recurrences.

HURLEY HOSPITAL — M. S. Chambers, M.D. $1,000.00

"The Flicker Photometer"

The study of the flicker photometer has been completed and a paper will be published in the *American Heart Journal.* The previously described efficiency of this mechanism in the detection of arterial and especially coronary artery disease has not been substantiated.

HENRY FORD HOSPITAL—B. E. Goodrich, M.D. $1,000.00

"Blood Oxygenation During Angina Pectoris"

Technical assistance to carry on these studies has just become available so that the project is now being actively carried out and consequently no report can be made.

UNIVERSITY OF MICHIGAN—F. E. Shideman, M.D. $4,000.00

"Energy Sources for the Renal Tubular Transport of Sodium"

This study into the energy sources in the renal tubular transport of sodium may be divided into two parts. These have to do with the mechanism involved in the production of ammonia in the kidney and the screening of compounds for their ability to inhibit ammonia formation from certain amino acids by enzyme substances. A number of inhibitors of intermediary metabolism have been studied in relation to their effects upon sodium excretion in the dog. This approach was made in an attempt to find a chemical agent sufficiently potent and selective to reduce the production of ammonia in the kidney, thus a great loss of fixed base, i.e., sodium, and with it water could be achieved. The net result of this would be to find a new method of treatment for the prevention and/or treatment of dropsy. A great number of compounds were studied for these effects and several promising avenues have been opened up but are in need of further study.

Dr. Shideman has accepted the position of Professor of Pharmacology at the University of Wisconsin and left the University of Michigan on August 31, 1952. The University has advised us that this project will, therefore, be terminated as of September 1, 1952, but this work is being continued by Dr. Shideman at the University of Wisconsin under support from the Wisconsin Heart Association.

UNIVERSITY OF MICHIGAN—Cameron Haight, M.D. $1,700.00

"The Function of the Respiratory System as Influenced by Heart Disease and a Correlation of Pulmonary and Cardiac Function Before and After Pulmonary Resection"

This grant has provided a fellowship to Dr. Delbert D. Neis. Experimental work in performing intra-pericardial aorta-pulmonary shunts in congenital heart disease is being studied. This study was undertaken because of lack of equipment needed for the proposed study on the function of the respiratory system as influenced by heart disease and a detailed study of the heart in patients before and after pulmonary surgery. The necessary equipment has arrived and the study is being conducted as originally proposed.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—PROFESSOR FRED RIGHTS. $500.00

"Virus Etiology of Pericarditis and Myocarditis"

A single case has been studied to date and no infectious agent has been found. Two other cases were restudied in great detail, but no infectious agent was found. Because of the dearth of clinical material, this investigator has been allowed to retain these funds in his possession for the coming year.

UNIVERSITY OF MICHIGAN—PROFESSOR GEORGE GRANGER BROWN. $1,320.00

"Fundamental Principles of the Streaming Potential Concept"

This grant has made possible a fellowship for Mr. Philip E. Bocquet. A fundamental study has been made of the basic principles of the streaming potential concept. It is felt that substantial progress has been made in clarifying the basic principles pertaining to the streaming potential concept and that these may be in time applied to physiological problems involving fluid flow measurements. It is noteworthy that this grant to the Department of Chemical and Metallurgical Engineering of the University of Michigan is instrumental in developing new tools in physiological measurement.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—PROFESSOR FRED RIGHTS. $330.00

"A Study Designed to Detect the Presence of Circulating Tissue Antigens That May Be Induced in the Rat Following Streptococcal Infection"

The project is now in progress. New animals and supplies have all been purchased. A report is expected shortly.

HARPER HOSPITAL—ROBERT A. GERISCH, M.D. $1,500.00

"A Study of the Effects of Cortisone Upon Experimentally Produced Myocardial Infarcts"

This sum was completely expended to provide a fellowship for Dr. Robert Gerisch to assist in the continuation of studies begun through finances from other sources. These studies have entailed the use of ACTH and Cortisone upon experimentally produced myocardial infarction.

It was found that there is an increase in blood supply to the heart when the hormones were used and a decrease in the mortality rate. Microscopic studies showed less cardiac damage and fewer thromboses in the treated specimens.

This work was presented at the last Meeting of the American Medical Asociation and the exhibit was awarded a certificate of merit. A paper has been submitted and has been accepted by *Circulation*.

A plan for the clinical investigation of these hormones has been prepared.

STUDIES WITH THE FLICKER PHOTOMETER

(Continued from Page 56)

Conclusions

1. Tests with proper apparatus and technique indicate that the flicker photometer is a satisfactory instrument both from the standpoint of accuracy of calibration and reproducibility of frequency of flashes at a given setting of the dial.

2. Nitroglycerine flicker tests done on sixty-seven normal subjects showed a small but significant number (4-6 per cent) of positive tests.

3. Flicker fusion tests carried out on eleven patients with known coronary artery disease were all negative.

4. It is concluded that, although the flicker photometer itself is a good and accurate instrument, the flicker fusion test as advocated by Krasno and Ivy may not be a reliable test for spasm of the retinal arteries, and it should not be used for the diagnosis of heart disease.

The author wishes to thank Mr. Richard McFee for technical studies done with the flicker photometer and Dr. F. D. Johnston for suggestions during the course of the work and for help in the preparation of the paper.

References

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2. Fox, E. L., and Wright, I. S.: The nitroglycerine-flicker test. Circulation, 4:350 (Sept.) 1951.
3. Keys, A., and Simonson, E.: The flicker fusion frequency and its response to nitroglycerine in normal subjects and in patients with cardiovascular disease. Circulation, 5:215 (Feb.) 1952.
4. Krasno, L. R., and Ivy, A. C.: The response of the flicker fusion threshold to nitroglycerine and its potential value in the diagnosis, prognosis and therapy of subclinical and clinical cardiovascular disease. Circulation, 1:1267, 1950.
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University Hospital

Earle A. Irvin, M.D., Detroit

President of Industrial Medical Association

He was born as an "Irvin": he was given the name of "Earle": but his fitting name is "Bud." It must fit since everyone uses it, even his wife calls him "Bud." Under any name he was and is destined for a top place whether as a student, an intern, a medical director, or the president of an outstanding national medical association.

My first touch with Bud was in the medical department of Fisher Body Division of General Motors Corporation in Flint. That must have been in 1936. He was only two or three years out of medical school and looked it. Even then he had the glint of zeal in his eyes. His chief spoke fondly of him so that my own interest was piqued. "What has he got? What motivates him?" Those were my questions. The reply was, "Well, he knows medicine as a personality, knows enough to get out in the plant and makes friends there and he looks right at you when he talks." Those words of praise, even though homely, portray the qualities of desirability for any physician seeking to specialize in the practice of industrial health.

To date him, Bud was born in 1908. After some of the usual joys and vicissitudes that attend boyhood, Bud landed in the University of North Dakota in 1926. The year 1929 found him in Ann Arbor at the medical school where he was graduated in 1933.

The first draft of this profile runs "He was married pretty soon after graduation to Olga Joye Hansen." That's not a wrong statement. But let's revise it. "Soon after graduation he was married to pretty Olga Joye Hansen." Now they are four—a boy and a girl complete the tetrad.

Bud's internship was at Hurley Hospital in Flint. That was in 1934. Then the appointment to the Fisher Body plant. Quickly he attracted attention. Soon he was the head of the medical service at the Cleveland plant of Fisher Body making progress at an astonishing tempo. The musicians would attach the word "allegro" to him. In any language "Bud Irvin" means alacrity and liveliness. By that time youthfulness was giving way to maturity. Bud was becoming an administrator. Bud was becoming a salesman—a salesman of everything good, the good of industrial medicine, the good of medicine in industry, the good of Bud Irvin.

About 1941, Bud became associated with one of the major rubber companies in Akron, still in the medical department, but that divorcement from General Motors was temporary. Soon there was a return to his first love. In 1942 he became medical director for the Cadillac Motor Car Division of General Motors Corporation in Detroit. And, there he is to this day, a superb medical director.

The medical department of the Cadillac Motor Car Corporation is different from what he found in 1942. That difference is a portrait of Earle A. Irvin, M.D., industrial physician. Among his many innovations is the emphasis on individualized medical service for the employes of his company—personalized to a degree that little characterizes the average medical department. At the end of World War II he designed the specifications for a physically new medical department which has become earmarked as a practical showpiece for all medical departments. One may wonder where Bud attained those capacities that approach good engineering, good architecture, his sense of compactness, con-

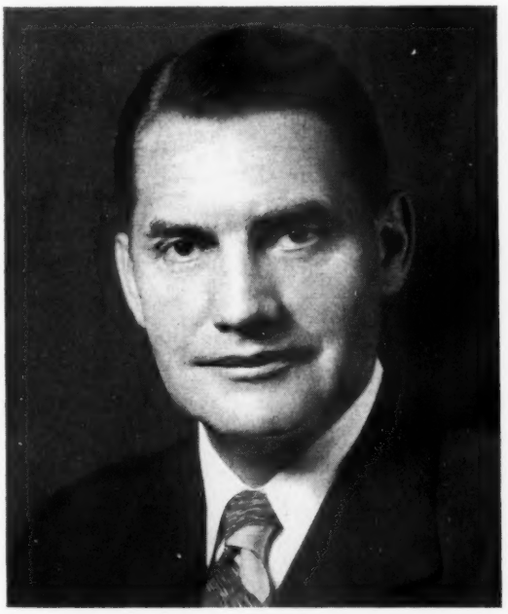
(Continued on Page 92)

A dinner honoring the President of the Industrial Medical Association, Earle A. Irvin, M.D., will be held at the Sheraton-Cadillac Hotel, Detroit, Tuesday, March 10, 1953, at 6:30 p.m.

Harry Monroe Nelson, M.D., Detroit

President, American Cancer Society

Doctor Nelson, better known as Harry to his close friends and medical associates, was born of Danish-American parents, in the little city of Kane, Pennsylvania, in 1895. There were seven little Nelsons to share the bounties of the Nelson home in Kane. It is improbable that any of us in Michigan would have heard of Kane, had it not been for the Nelson family, for Kane is only a dot in the hills of Western Pennsylvania, situated on the edge of coal and gas deposits.



Careers are frequently shaped by coincidence. In Harry's case, his destiny was derived from childhood affection for a high school teacher, who was, one might say, an ambassador from Michigan. This influence directed Harry to the University of Michigan, eventually to its medical school in 1916 and as events have shaped his career, to his adopting Michigan as his permanent home. Harry emphasizes the great credit due to his mother's indomitable spirit to overcome adversity. This driving force is also exemplified in Harry's life, the will to tackle a job and get things done.

There were others in the Nelson family to make Medicine their career. Catherine, training at Michigan and Columbia, is now Superintendent of Nurses in Salem, Massachusetts, and Richard, a younger brother, is a Doctor of Medicine also in Massachusetts.

During World War I, although only a Junior in medical school, Doctor Nelson was asked by Dr. Cyrinus Darling, Professor of Surgery, to serve as an intern due to a shortage of interns. In this way, he was able to defray the expenses of board and room while gaining valuable experience. This was Harry's introduction to medical practice.

After graduation in 1920, he became an instructor in Anatomy and Surgery at the Univerity of Michigan Medical School. In this formative period he was chiefly influenced by the teaching and examples of Dr. Hugh Cabot and Dr. Ruben Peterson. Here he became interested in the specialty of Obstetrics and Gynecology.

In 1923, he came to Henry Ford Hospital as an associate of Dr. Jean Paul Pratt in the practice of Obstetrics and Gynecology and remained until 1931. It was here, while developing in the medical field, that Harry apparently found some time for social activity, because he met the lovely Elizabeth Jones who became associated with the nursing department after graduation in the same institution. Miss Jones, after having taught school, directed her attention to the medical field, through the influence of her father, Dr. Robert J. Jones, one of the founding fellows of the American College of Surgeons. Harry and Elizabeth were married in September, 1927. They have two sons, Harry M. and Robert H. It seems that both boys either will follow their father's profession or his avocation—Harry intending to enter medical school and Robert, Michigan State College to study farming.

The new Woman's Hospital had just been completed in 1929, and Harry, having developed the urge to go on his own, became associated with this institution in 1931. He became Chief of the Gynecological Service, a position which he has long held with distinction. The residency training program has been one of Doctor Nelson's chief

A dinner honoring Harry Monroe Nelson, M.D., President of the American Cancer Society, will be held at the Sheraton-Cadillac Hotel, Detroit, Thursday, March 12, 1953, at 6:30 p.m.

interests as attested to by the influence he has exerted on its standards of proficiency in gynecologic diagnosis, treatment and surgery. The excellence of this training program has been responsible, in no small part, for establishing the affiliation of this residency with Wayne University College of Medicine. Doctor Nelson is Associate Professor of Gynecology at Wayne.

The "Cancer Problem" early had been one of Doctor Nelson's chief concerns in Gynecology. He organized the Cancer Committee of Woman's Hospital in the early days of his association and has directed its activities since. In 1937 the Southeastern Michigan Division of the American Society for Control of Cancer was organized. Doctor Nelson has served this Division throughout its independent history. In 1938 the first executive committee was appointed, the committee consisting of Dr. H. M. Nelson, Dr. M. A. Darling, Dr. C. D. Brooks, Dr. T. A. Gruber and Dr. F. M. Meader. Doctor Nelson was made chairman of the committee. In 1945, the American Society for Control of Cancer was reorganized into the American Cancer Society, Inc. Doctor Nelson continued on as president of the local executive committee. Realizing that the ideal of the late Dr. Rollin Stevens—a Cancer Institute in Detroit —was of great importance in furthering cancer work in this area, Doctor Nelson and other members of the Executive Committee of the American Cancer Society, Southeastern Michigan Division, placed their fund-raising potential behind the "ideal" of Doctor Stevens, and through their efforts and the efforts of the Woman's Field Army, the Detroit Cancer Center was developed, with its growth into several coordinated agencies: The Woman's Activities of the ACS; The Yates Memorial Clinic; The Michigan Tumor Registry and The Detroit Institute of Cancer Research. The splendid building at 4811 John R. Street stands as a tribute to the advanced thinking of this committee. The affiliation of the Yates Memorial Clinic and the Detroit Institute of Cancer Research with Wayne University are further testimonials of the wisdom exhibited by the local executive committee of the American Cancer Society, and the Board of Trustees of the Detroit Institute of Cancer Research. After Doctor Stevens' death in 1946, Doctor Nelson succeeded to the presidency of the Detroit Institute of Cancer Resarch and has continued to serve as a member of its Board of Trustees.

Doctor Nelson has been a member of the Board of Trustees of the American Cancer Society (national) since its reorganization in 1945, and chairman of its Medical and Scientific Committee the past two years. In 1952, in keeping with his faithful and excellent service to the organization, he was elected president. These activities have required much sacrifice of time and energy, entailing frequent trips to New York and other medical centers. One of his outstanding accomplishments nationally was the breaking of the barrier which resisted the affiliation of a national fund-raising organization to federated fund raising such as we have in Detroit in the United Foundation. The American Cancer Society was the first national organization to accept the principle of federated fund raising, in place of individual isolated campaigns.

Doctor Nelson's medical society affiliations include membership or fellowship in the American Medical Association, American College of Surgeons, American Board of Obstetrics and Gynecology, Central States Gynecological and Obstetrical Society, American Academy of Obstetrics and Gynecology, Michigan State Medical Society, Wayne County Medical Society and the Michigan Society of Obstetricians and Gynecologists. He served the latter society as president in 1939.

These attainments in the field of medical science and practice could hardly have been successful without time for diversion with its physical and mental relaxation. Here we return to Harry, who has found these relaxations in his farm and farm home at 20811 Ten Mile Road. While in the field of medicine his success has become national, his perfection in development of pure-bred saddle horses and Hereford cattle has become well known to his farmer neighbors.

It is difficult to conclude a sketch of this type because it must end prematurely—only time will end such a career. We know that Harry will carry on, we hope for many years, continuing to give personal sacrifice for others in the true tradition of Doctors of Medicine.

Doctor Nelson, we all salute you on this occasion!

The possibility of cancer should occupy a prominent place in every physician's thinking in every examination he makes.

* * *

The co-operation of the parent, physician, surgeon, pathologist, radiologist, and health officer is necessary in each case of childhood malignancy if unnecessary deaths from this group of diseases are to be prevented.

Michigan State Medical Society

Supplemental Roster, 1952

Names of members for whom 1952 dues have been received from the County Medical Society Secretary from August 31, 1952, to December 10, 1952.
(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" for Retired Members; "A" for Associate Members; "M" for Military Members; all others are Active Members)

ALLEGAN COUNTY
Corkill, Clifford C.....Douglas

ALPENA COUNTY
Brown, Donald C.....312 E. Chisholm St., Alpena

BERRIEN COUNTY
Eidson, Hazel D.....Berrien Springs
Irgens, Edwin R.....11 Peoples State Bank, St. Joseph
Litvin, Lewis E.....Berrien Center
Ruth J. Griswold.....190 Washington, Benton Harbor
Skinner, James.....922 Main Street, St. Joseph
Swingle, Alvin J.....84 W. Main, Benton Harbor
Urist, Maurice D.....454 Pipestone, Benton Harbor

BRANCH COUNTY
Culver, Bert W.....78 Division St., Coldwater, Michigan

CALHOUN COUNTY
Brown, Clarence R.(M).....
Percy Jones Hospital, Battle Creek

DICKINSON-IRON COUNTIES
McEachran, Hugh D.....401 East C St., Iron Mountain

EATON COUNTY
Engle, Paul H.....121 S. Main St., Olivet

GENESEE COUNTY
Biggar, Henry R.....3109 S. Saginaw, Flint
Burnside, Howard B.....300 Whitmore Rd., Detroit
Clark, Clifford P.....
515 Villa Bella Ave., Coral Gables, Fla.
David, T. George.....5502 N. Saginaw, Flint
Hufton, Wilfrid L.....721 W. Sixth Ave., Flint
Miller, Bryce A.....111 N. Beech St., Flushing
Morrish, Ray S.....1715 Crescent Dr., Flint
Sandberg, Russell G...1315 Mott Foundation Bldg., Flint
Varney, Howard L.....1415 Broadway, Flint

GOGEBIC COUNTY
Anderson, Charles E.....Anvil Location, Bessemer

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Merritt, Harry E.....112½ E. Front St., Traverse City
Trautman, Frederick D.....Frankfort
Wilcox, Paul H.....526 W. 10th St., Traverse City

HILLSDALE COUNTY
Kline, Fred.....Litchfield

HOUGHTON-BARAGA-KEWEENAW COUNTIES
King, Sidney.....St. Joseph Hospital, Hancock

INGHAM COUNTY
Foust, Earl H.....816 E. Key Ave., Eustis, Fla.

IONIA-MONTCALM COUNTIES
Campbell, R. E.....106 N. Depot Street, Ionia

JACKSON COUNTY
Hackett, Thomas E.....401 Carter Bldg., Jackson

KENT COUNTY
Barofsky, G. F.....736 Burton St., S.E., Grand Rapids
Booher, Craig E...Blodgett Medical Bldg., Grand Rapids
DeWar, Murray M.....
623 Medical Arts Bldg., Grand Rapids
Houghton, Richard C.....
525 Glenwood, S.E., Grand Rapids
Kinkella, Albert M.....
Kendall Professional Bldg., Grand Rapids
Pool, John D.....445 Cherry St., S.E., Grand Rapids
Stoneman, Fernley.....11 South Wilson, Grandville
Thomson, John W.....
1516 Wealthy St., S.E., Grand Rapids

LAPEER COUNTY
Bishop, Gilbert C.....Almont
Boruch, Leon R.....Drawer A., Lapeer
Lass, Edward H.....Lapeer
O'Brien, Daniel J.....Nepessing St., Lapeer
Rehn, Adolph T.....Lapeer State Home, Lapeer
Smith, G. L.....Imlay City

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Hewes, Ara B.....146 E. Maumee St., Adrian
Hewes, William H.....146 E. Maumee St., Adrian
Hornsby, Wm. B.....132 E. Chicago, Clinton

MACOMB COUNTY
Parker, B. Morgan.....Utica
Sturm, Frederick A.....29405 Jefferson St. Clair Shores

MARQUETTE-ALGER COUNTIES
Drury, Chas. P.....Marquette Health Office, Marquette
Fennig, Foster A.....315 N. Front St., Marquette
Serbst, Charles A.....Bacon Bldg., Marquette

MIDLAND COUNTY
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Kaasa, Laurin J.....Midland

MONROE COUNTY
Mahoney, Thomas W.....318 E. First St., Monroe
Tomlinson, Ledyard H.....Newport

NORTHERN MICHIGAN MEDICAL SOCIETY
Larson, Walter E.....214 N. Main St., Cheboygan
Lawrie, Guy K.....Petoskey
Palmer, Russell E.....Charlevoix
Stringham, James R.....225 Backus St., Cheboygan

OAKLAND COUNTY
Barker, Charles P.....Pontiac State Hosp., Pontiac
Blackwell, Leonard.....549½ N. Perry, Pontiac
Carrie, Robert G.....23760 Woodward, Pleasant Ridge
Carrow, Joyce M.....622 Riker Bldg., Pontiac
Christie, Edward A.....412 Riker Bldg., Pontiac
Edwards, J. W.....8400 W. Eight Mile Rd., Ferndale
Geist, Edgar J.....Hills Theater Bldg., Rochester
Gibson, Richard E.....1011 Hazel Street, Birmingham
Hull, Robert P.....23625 Woodward, Ferndale
Keeffe, Eugene J.....St. Joseph's Hospital, Pontiac
Larson, Alvin R.....640 Riker Bldg., Pontiac
Meisner, Harry E.....10851 W. Ten Mile Rd., Oak Park
Milgrom, Sidney.....1229 W. Washington, Royal Oak

Neafie, Chas. A.....493 Orchard Lake Ave., Pontiac
Ports, Preston W.....33109 Grand River, Farmington
Prevett, William.....212 National Bldg., Pontiac
Sheridan, F. Michael.....
1307 S. Washington, Huntington Woods
Sibley, Harry.....15 Mathews St., Pontiac
White, Robert H.....47 Bloomfield Terrace, Pontiac
Zujko, Alphonse J.....1402 Pontiac State Bank, Pontiac

SAGINAW COUNTY

MacKinnon, Edwin D.....1616 Court St., Saginaw
Markey, Joseph P.....808 N. Michigan, Saginaw
Prior, Richard W.....Bridgeport
Sample, John T.....606 Rust St., Saginaw
Sullivan, Frances M.....1213 N. Michigan Ave., Saginaw
Weidner, Garland.....City Hall, Saginaw

ST. CLAIR COUNTY

Banting, Kenneth C.....Peoples Bank Bldg., Port Huron
Biggar, R. J.....
Bahrein Petroleum Co., Ltd., Bahrein Island, Persian Gulf
Carney, F. V.....1065 N. Riverside, St. Clair
MacPherson, C. A.....1327 Oakland Ave., St. Clair
Schaefer, W. A.....
Michigan National Bank Bldg., Port Huron

ST. JOSEPH COUNTY

Jacobowitz, John M.....49½ N. Main St., Three Rivers
Lamb, Harry.....101 N. Maple, Sturgis
Springer, Russell A.....Centerville

SHIAWASSEE COUNTY

Bach, Norman F.....113 E. Williams, Owosso
Gurden, Elizabeth L.....113 E. Williams, Owosso
Parker, Walter T.....Matthews Bldg., Owosso
Willoughby, William A.....812 Bradley St., Owosso

TUSCOLA COUNTY

Cook, Raymond R.....Akron
Swanson, E. C.....Vassar

VAN BUREN COUNTY

McFadden, R. I.....Bloomingdale

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Hinerman, Dorin L.....
Dept. of Pathology, University Hospital, Ann Arbor
Hodges, Fred J. III (A).....
University Hospital, Ann Arbor
Ivanoff, John C.....St. Joseph's Hospital, Ann Arbor
Kambly, Arnold H.....
411 First National Bldg., Ann Arbor
Kempf, Paul R., Jr. (A).....
University Hospital, Ann Arbor
Maher, James A. (A).....419 N. Ingalls, Ann Arbor
Reynolds, Robert M. (A).....
c/o Mr. George Stierer, 219 Taney, Gary, Ind.
Scott, Edward B. (A).....
1786 E. 12th St., Salt Lake City, Utah
Scott, Kathryn, N. G. (A).....
1786 E. 12th St., Salt Lake City, Utah
Wicht, Paul J.....1385 W. Michigan, Ypsilanti
Wilson, James LeRoy.....
University Hospital, Ann Arbor, Mich.

HONORARY MEMBERS

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Paul de Kruif, Ph.D.....Wake Robin, Holland
Charles E. Kahlke, M.D.....Benton Harbor
Leroy A. Porter.....Mich. Dept. of Health, Lansing

WAYNE COUNTY

Agnone, Eugene J.....1420 St. Antoine St., Detroit 6
Alford, Barry H.....690 S. Main St., Plymouth
Annessa, Domenico M.....3536 Burns, Detroit
Axelrod, Mildred A.....13725 Eight Mi. Road, Detroit 35
Axelrod, Robert G.....18518 Appoline, Detroit 35

Baima, Margaret.....1326 St. Antoine, Detroit 26
Barnett, Saul E.....744 Lathrop, Detroit
Barrett, Raymond J.....2258 Webb, Detroit 6
Bash, Nicholas P.....Veterans Adm. Hospital, Dearborn
Becker, Jos. W.....407 Kales Bldg., Detroit 26
Berlin, Allen.....722 Maccabees Bldg., Detroit 2
Brooks, Eugene M.....2400 Ewald Circle, Detroit 4
Bruder, Robert C.....9191 Prevost, Detroit 28

Cameron, A. H.....2853 Biddle, Wyandotte
Capuzzi, Eugene T.....501 W. Dunlap, Northville
Chalk, Carl C.....418 Hillcrest, Grosse Pte. Farms
Cherup, Nicholas.....11838 Jos. Campau, Hamtramck
Clark, Arthur M.....22400 Cherryhill, Dearborn

Clarke, Charles N.....2501 W. Grand Blvd., Detroit
Donelson, Kater.....27371 Michigan Ave., Inkster
Dranginis, Edward J.....850 N. Rademacher, Detroit 9
Dutcher, Dwight J.....14235 Crescent Dr., Detroit 23

Figiel, Steven J.....Grace Hospital, Detroit 1
Finkell, Lawrence J.....18916 Woodward Ave., Detroit 3

Gariepy, Louis B.....16401 Grand River, Detroit 27
Goldfaden, Alfred.....6157 Army, Detroit 9
Goodman, Maxwell M...9246 Grand River Ave., Detroit 4
Goss, Samuel B.....10 Peterboro, Detroit
Graham, Julius A.....4102 Brush St., Detroit
Griffin, Robert J.....20227 Lancaster, Detroit 24

Harmon, Walter.....2510 E. Davison, Detroit
Harris, Arthur D.....8943 Twelfth St., Detroit
Hendry, Hugh W.....2716 Rochester, Detroit
Henig, Fred N.....7605 W. Seven Mile Rd., Detroit 21
Hobbs, Donald V.....18530 Grand River, Detroit 23
Hodoski, Frank J.....3814 35th St., Detroit
Hurd, Brooks H.....20187 Schaefer Road, Detroit

Johnson, John F.....1512 St. Antoine, Detroit 26

Kenfield, Wm. J.....3350 Campbell St., Dearborn
Kirtland, William B.....2201 E. Jefferson, Detroit 7
Krabbenhoft, Kenneth.....Harper Hospital, Detroit 1

Leight, Leonard.....3440 Ewald Circle, Detroit 4
Lerman, Samuel I.....4400 Livernois, Detroit
Lipnik, Morris J.....15101 W. Seven Mi Rd., Detroit 35

Malcolmson, Joseph E.....16861 Wyoming, Detroit 21
Mandiberg, Jack N...12700 W. Seven Mi. Rd., Detroit 21
Martineau, Perry C.....1151 Taylor Ave., Detroit 2
McDonald, Wm. G.....7301 Schaefer Highway, Dearborn
Metzger, Harry C.....2294 Atkinson Ave., Detroit 6
Milton, Samuel B...600 Palmerston Ave., River Rouge 18
Missavage, Edward, Jr.....
Wayne Co. General Hospital, Eloise

Nehra, John N.....18514 Mack Ave., Detroit 36
Noer, Rudolf J.....1512 St. Antoine, Detroit 26
Noshay, Wm. C.....Henry Ford Hospital, Detroit 2

Palmisano, I. J.....25447 Plymouth Rd., Detroit 28
Prisbe, Edward J.....16604 Plymouth Rd., Detroit 27
Priver, Julien.....6741 West Outer Dr., Detroit 35

Raskin, Herbert A.....19466 Greenfield, Detroit
Reder, Benjamin.....20731 Evergreen, Detroit 19
Reive, David L.....24401 Plymouth, Detroit 28

Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Schneider, Charles L.....1512 St. Antoine, Detroit 26
Seelye, Juliette.....1050 Fisher Bldg., Detroit 2
Seski, Arthur G.....863 Fisher Bldg., Detroit 2
Sewell, Guy W.....16321 Mack Ave., Detroit 24
Shellhamer, Claire S.....438 Maccabees Bldg., Detroit
Sherman, William L., Jr.....201 E. Kirby, Detroit 2
Smyka, Stanley.....6111 Charles, Detroit 12

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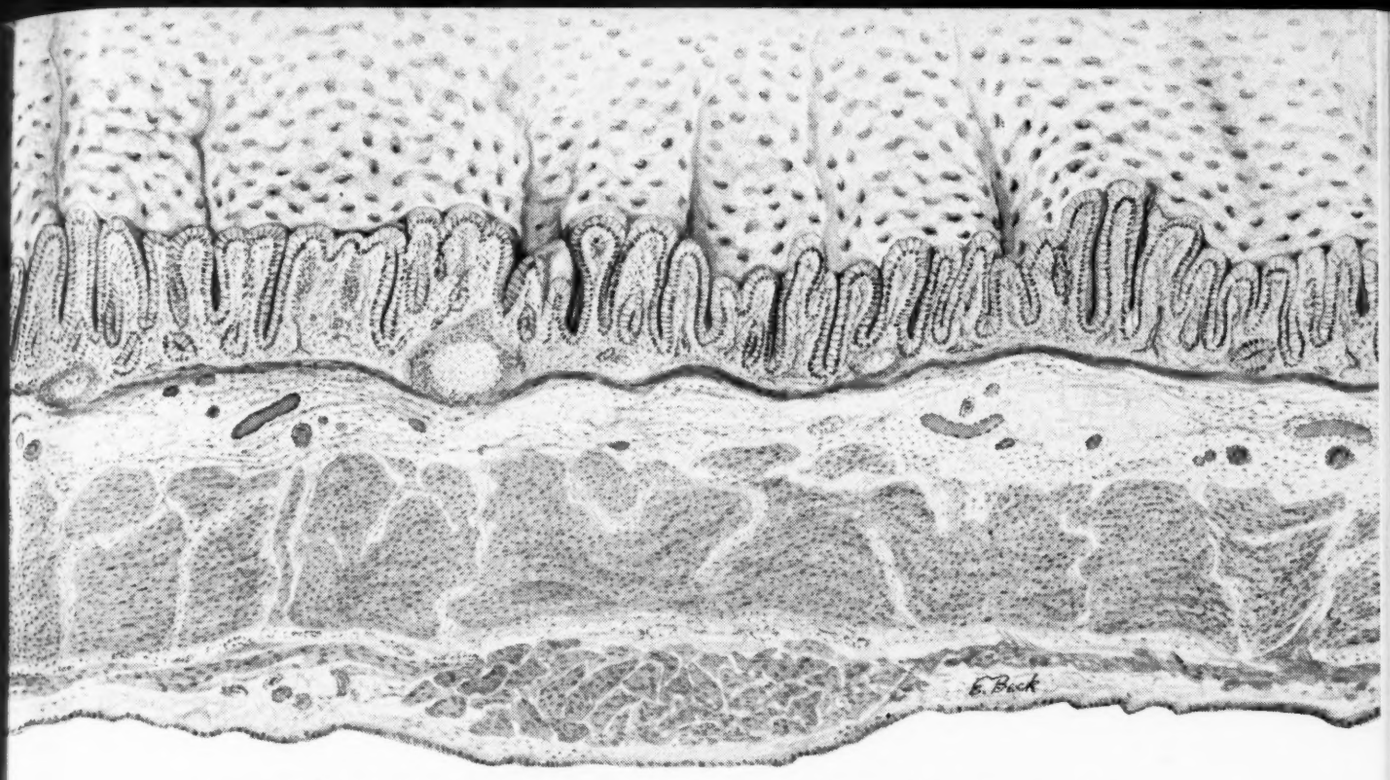

Normal peristaltic action results from activity of the muscle layers as they are gently distended by bulk within the intestine; mucosal irritants cause overactivity of the muscle layers resulting in hyperperistalsis or spasm.

Corrective Action of Metamucil® in Abnormal Physiology of Constipation

Abnormally prolonged colonic retention, whether in a spastic or an atonic colon, demands the greatest care to assure correction.

The mucosa does not require stimulating; hence, stimulating cathartics, "roughage" and other physical and chemical irritating measures, are today often considered irrational.

On the other hand, the muscularis does require a stimulus to initiate peristalsis. This physiologic stimulus is the mechanism by which bland distention of the colon establishes a reflex, with the muscularis at the terminus of the reflex arc.

Metamucil literally reeducates the sluggish and also the spastic colon. Taken with adequate amounts of water, Metamucil forms a smooth, hydrophilic colloid. As this colloidal mass passes through the large intestine, it exerts a gentle, distending pressure within the lumen, thus initiating the peristaltic reflex necessary for evacuation.

A program of Metamucil therapy helps to restore proper tone to the intestinal musculature, thereby establishing proper bowel habits.

Metamucil® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

G. D. SEARLE & Co.

Research in the Service of Medicine

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

SALMONELLA MONTEVIDEO SURVIVE IN POWDERED EGG YOLKS

Another reminder of the amazing survival capacity of the Salmonella organisms came with notification to the Department from the Public Health Service that shipments of powdered egg yolk for use in supplementary feeding of infants had been found to be infected with Salmonella Montevideo and had been seized under the Pure Food and Drug Act. Infants are highly susceptible to this organism. The manufacturer immediately traced and withdrew all shipments.

In the process of preparation, the powdered egg yolks had been pasturized but heat does not affect the Salmonella organisms in the dry state. In fact, the process was exactly suited to their preservation.

Several years ago, outbreaks attributed to this organism occurred in two Michigan institutions, one county and one state, alerting hospital administrators to a realization that powdered eggs should be used only in preparation of foods that are cooked. In both instances, the powdered eggs had been used in making eggnogs for debilitated patients.

NEW BIRTH CERTIFICATES SOON TO BE ADOPTED

A new five-part birth certificate will be put in use by the Department, probably some time in January. It has been tried out very successfully in a Lansing hospital.

One copy of the new certificate will be for the hospital, one for the local registrar, one for the county clerk, one for the parents and the original for the Michigan Department of Health. A work-sheet replica of the certificate will also be furnished to hospitals in padded form, for convenience in collecting data at the bedside. This will go in the patient's file.

The carbon copies of the certificate for the county clerk, the local registrar and the parents will be in abbreviated form, omitting confidential data for medical and statistical use.

NUTRITION APPRENTICESHIP PROGRAM PROGRESSES

The apprenticeship program in public health nutrition established in the Department in October after much preparation has reached the point where the two trainees have completed their orientation and have been assigned to work in local health departments. They will spend the remainder of their year's training period in the field, working as members of the staff of the local departments, with technical supervision from Department nutritionists.

This on-the-job training program was set up to help meet the increasing demand for nutrition service throughout the state. It was planned by the Nutrition Recruitment and Training Committee of the Department which has representation from local health departments, vocational education, home economics education, public health education and voluntary health agencies. The American Dairy Association of Michigan contributed 50 per cent of the cost for the first year's program. Two apprenticeships were established. Upon completion of the year's training, the trainees will be available for positions in local health departments in Michigan.

TWO NEW TRI-COUNTY HEALTH DEPARTMENTS ORGANIZED

Two new tri-county health departments began functioning January first, the Isabella-Mecosta-Osceola health department in central Michigan and the Iron-Ontonagon-Dickinson health department in the Upper Peninsula. Main office of the former wil be in Mt. Pleasant with branches in Big Rapids and Reed City. The main office of the Iron-Ontonagon-Dickinson department will be in Stambaugh with branch offices in Ontonagon and Iron Mountain.

JANUARY DAYS—NOT JULY—ARE DOG DAYS

The recent experience of a southern Michigan county emphasizes the widespread damage that one rabid dog can do, and highlights the need for urging vaccination of dogs now for the protection both of the dogs and of human beings with whom they come in contact. In Michigan, late winter and early spring is the peak season for rabies among animals, and dogs are the chief offenders.

A Pekingese on a farm in the county in question developed rabies and as a result sixteen persons are under treatment, the dog itself died as did another dog on the same farm, a neighbor's dog and a ram on that farm died and a cow, a calf and a lamb belonging to neighbors died. All were diagnosed by the laboratory as rabid. Seven other dogs were isolated for observation and ten cats were killed.

Since January 1, 1952, cases of rabies in animals reported to the Michigan Department of Health have totaled 179. This is about the usual number. There have been no reports of rabies in humans in that time. Only one death from rabies has occurred since 1948, but an average of 1,000 Michigan persons are given anti-rabies injections each year.

Michigan's dog licensing law has a provision giving county boards of supervisors the power to adopt a regulation requiring that all dogs in the county be vaccinated before they can be licensed. Some counties have taken advantage of this provision and require vaccination as a prerequisite to licensing. Many others have not. In the absence of any statewide uniformity, the Department is emphasizing dog vaccination in news releases and by radio. Vaccination protects for about a year.

In Memoriam

HENRI BELANGER, M.D., of River Rouge, died November 1, 1952, at the age of eighty.

Doctor Belanger was a widely known doctor of medicine in the Down River area and had practiced in that locality for the past fifty-eight years. He was graduated from the Detroit College of Medicine in 1894.

Doctor Belanger was an Emeritus Member of both the Wayne County Medical Society and the Michigan State Medical Society.

He was on the staff of the Delray General Hospital from 1896 to the time of his death and also served as a surgeon for the Michigan Central Railroad from 1905 to 1935. In addition to these activities, he was health officer of River Rouge from 1899 to 1921 and again from 1945 until his death. He was instrumental in the incorporation of River Rouge as a village and later as a city. His activities in public affairs also included membership on the River Rouge Board of Education, a position he had held since 1921.

Besides his wife, Rose, he is survived by a son and three daughters. They are Ernest Belanger, M.D., Mrs. Clara Montie, Mrs. Anne Botz and Mrs. Rosalie Andervak.

WALTER G. COLVIN, M.D., of Grand Rapids, died November 3, 1952, at the age of fifty-two.

For the past twenty-five years he had served the community of Grand Rapids first as a radiologist and later as a surgeon. Before coming to Grand Rapids, he studied at the University of Michigan Medical School, and then he joined the staff of Butterworth Hospital in Grand Rapids as a radiologist. He was graduated from the University of Western Ontario Medical School in 1921. Later, he studied surgery at Johns Hopkins University. During World War II he served as a major in the Medical Corps.

At the time of his death, Dr. Colvin was Vice Chief of Staff of Butterworth Hospital.

He is survived by his wife, Eva; three children, William, Patricia, and John; two brothers, Gerald, of Kingston, Ontario, and John of London, Ontario.

MARION F. PARRISH, M.D., of Sturgis, died October 31, 1952, at the age of seventy-nine. For the past thirty years he had served the community of Sturgis as a surgeon. Before that Dr. Parrish had practiced in Indiana following his graduation from the University of Cincinnati College of Medicine in 1897.

Dr. Parrish had been Chief of Staff of Sturgis Memorial Hospital and was a member of the St. Joseph County Medical Society. He also was a member of the Michigan State Medical Society's "Fifty Year Club." He served in the medical corps during World War I.

Dr. Parrish is survived by his wife, Minnie, and a daughter, Mrs. Earnest Henricks, of Sturgis.

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FRANK A. PRATT, M.D., of Kalamazoo, died September 29, 1952, at the age of eighty. For the past forty years he had served the community of Kalamazoo. Previous to that, Dr. Pratt had practiced in Centreville following his graduation from the Detroit College of Medicine in 1906.

Dr. Pratt was a member of the staffs of Bronson and Borgess Hospitals. He is credited with delivering the first baby to be born at Borgess Hospital after the institution opened in 1917.

He was a member of the Kalamazoo Academy of Medicine and a Life Member of the Michigan State Medical Society.

Dr. Pratt is survived by two daughters, Mrs. Gordon Dilno and Mrs. Margaret Boersma, of Kalamazoo. He also leaves three grandchildren.

ISAAC L. SPALDING, M.D., of Hudson, died September 1, 1952, at the age of seventy-seven.

Doctor Spalding was graduated from the Detroit College of Medicine in 1897. He was a member of the Lenawee County Medical Society and an Emeritus Member of the Michigan State Medical Society.

RAY C. WHITMORE, M.D., of Hancock, died October 28, 1952, at the age of sixty-nine.

He had served the community of Hancock as an otolaryngologist and ophthalmologist. Dr. Whitmore was graduated from the University of Michigan Medical School in 1906.

He was a Retired Member of the Houghton-Baraga-Keweenaw County Medical Society and of the Michigan State Medical Society.

Besides his wife, Ethel, he is survived by a daughter, Mrs. Mary Steveling, of Rochester, New York; a son, Ralph, of California, and a sister, Austa Cox, of Quincy.

EARLE A. IRVIN, M.D.

(Continued from Page 82)

venience. It is possible to suspect that his work prior to becoming a physician provided this guidance. That goes back to Bismarck, North Dakota, where he served in the repair department of the International Harvester Company. That experience, combined with his subsequent acquisitions in the science and art of medicine reflects itself at the Cadillac plant in his understanding of the requirement of rehabilitation, his good placement methods, his medical record system, his grasp of psychosomatic medicine, his warmth in human relations, his case-finding programs, his concepts of prevention, his medical department.

If the growth and development of a human being could be plotted out on graph paper, this graph in the case of Bud is so near vertical as to require pole spurs to ascend. "Beware of the ambitious man. He is dangerous." Bud is clearly ambitious but no one shouts "Beware." His ambitions run not to himself but to industrial medicine. He has a burning fire to see that in the country over, industrial medicine attains its rightful place as a science laudable in the safeguarding of all industrial workers, in fitting properly into the amazing expansion of the nation's undeniable industrial culture.

Impatient Apostle of Best in Industrial Medicine

Bud is a power now—a voice that has helped to dispel the wilderness of shabby industrial medicine—a hand that has dipped personally into the development of industrial medicine—an eye that discerns the future requisites of industrial medicine for oncoming generations of industrial physicians.

Industrial medicine was a late starter in this country. With some few exceptions the first generation of industrial physicians started its ministrations about 1910. That first generation is disappearing. Those who survive have become the nestors, the elder statesmen, the historians, the repositories of experience. Bud belongs not to that generation. He is the second generation. For that generation he is a spokesman; but among all industrial physicians, young and old, he is a leader.

The stripling of the 1920's working away in the repair shops of the International Harvester Company in North Dakota, wondering perhaps what life might hold for him is now the distinguished president of the Industrial Medical Association, an international organization of industrial physicians, all of good will, of working hands, of planful heads.

Congratulations, Mr. President! Congratulations, Bud!

I place economy among the first and most important virtues and public debt as the greatest of dangers. To preserve our independence we must not let our rulers load us with perpetual debt. We must make our choice between economy and liberty, or profusion and servitude. If we can prevent the government from wasting the labors of the people under the pretense of caring for them, they will be happy. The same prudence which in private life would forbid our paying our money for unexplained projects forbids it in the disposition of public money.—THOMAS JEFFERSON.

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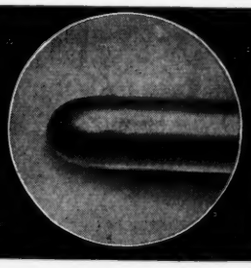

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Correspondence

The Council of the Michigan State Medical Society
Lansing 15, Michigan

Gentlemen:

We have had a substantial number of comments from doctors locally and throughout the state regarding the United Fund story in the October issue of THE JOURNAL.

We would like those responsible for the inclusion of this to know our appreciation.

So far as we know, this is the first article to appear in any professional journal in Michigan and we commend you for your pioneering efforts in this area.

We also deeply appreciate the editorial "Red Feather and Torch." We have had many favorable editorials in various newspapers and magazines during the past few years but certainly none have given better or more objective treatment.

You will be interested to know that the figures to date indicate that the pledges for the 1952-53 United campaigns throughout Michigan are about two million dollars greater than those made in any previous year. Some of this increase, of course, is due to favorable economic conditions but a very substantial portion must be credited to more enlightened giving. It is editorial and other comment such as yours which is contributing to this end.

Please express our thanks to all interested.

Sincerely yours,
F. A. McCARTNEY
Executive Vice President
United Health and Welfare Fund of Michigan, Inc.

Lansing, Michigan
December 16, 1952

* * *

Dear Doctor Haughey:

This letter is being written at the suggestion of our Medical Advisory Committee for possible publication in the Medical Journal, for the information of physicians who may have wondered about the necessity or advisability of securing a signed release from the patient before medical information is released to welfare agencies, a question that is occasionally asked this Department.

The question as it pertains to assistance administered through the county bureaus of social aid, which includes old age assistance, aid to dependent children, aid to the blind and aid to the disabled, was considered at a recent meeting of our Medical Advisory Committee.

The Committee noted that the application for any of the above types of assistance includes the following paragraph:

> "I agree to give complete and accurate information to representatives of the county bureau of social aid, and I empower the bureau to obtain such information from other sources as may be necessary to establish my eligibility for assistance."

It was the opinion of the Committee that this statement adequately protects the doctor who gives medical information in response to a request from the county bureau of social aid.

With regard to requests from the county department of social welfare, which as you know administers general relief and infirmary and hospital care for afflicted

adults, each county department defines its own policies and develops its own forms. Some of them we know include an authorization similar to that used by the bureaus of social aid, but we do not know that all of them do.

We believe that this information will be of interest to the members of the Medical Society and will appreciate your courtesy in bringing it to their attention.

Very truly yours,
W. J. MAXEY
Director, State of Michigan, Department of Social Welfare

Lansing, Michigan
November 25, 1952

* * *

Dear Dr. Haughey:

Over this weekend I had an opportunity to make a try at catching up with my home reading and read your editorial on the Commission in the October issue. I thought you did a very good job with this editorial and am sure the Commission members will be pleased. Copies of the editorial will be made available to them.

If we can ever be of assistance to you by supplying you with information, I hope you will call on us.

Sincerely yours,
HARRY BECKER
Associate Director, Commission of Financing of Hospital Care

Chicago, Illinois
December 1, 1952

* * *

Doctor Haughey:

I have just received a copy of the review in your September JOURNAL on my book, "Man To Man." This is a splendid appraisal by one who shows a rare capacity for analyzing the trend of our national monetary practice and the impacts which flow from them. I want you to know that I am deeply appreciative of your efforts in behalf of our country.

We do know that the professions have the highest stake in the maintenance of constitutional government, being the greatest immediate sufferers in a communistic society.

BERNARD N. WARD, C.P.A.

* * *

The Council
Michigan State Medical Society
Lansing, Michigan

Gentlemen:

It is my pleasure and privilege to express to you the grateful appreciation of the Bay County Medical Society for your valuable assistance in our recent hospital campaign.

We are appreciative of the co-operation received from our various groups, especially the Woman's Auxiliary and the Medical Assistants. It is very apparent however that the campaign could not have succeeded without the expert planning, timing and execution of the plan of action developed by Mr. Hugh Brenneman and his highly efficient staff of Messrs. Kantner, Campbell and Ford.

The volume of work and its details, which will be evidenced by the statistical summary being prepared, will be unbelievable. Many of our friends, even as late as election morning, predicted our defeat because of the general adverse public relations of the Medical profession over the years.

Any doubt in the mind of physicians as to our need for a department of Public Relations in medical organizations should be dispelled by the herculean task performed by Mr. Brenneman and his staff. We in Michigan should be proud of what we know is the most efficient Public Relations Department in any State Medical Society.

The whole campaign was conducted with extreme dignity. The utilization of media and the timing of releases and events was perfect. The general effect of the type of

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The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

campaign and its manner of conduction has reflected favorably for the Medical profession upon the public.

While the campaign was costly and strenuous you can justifiably feel proud of the contribution you have made to the maintenance of high Medical Standards and the control of substandard practitioners.

We are indeed grateful for your help and cannot speak too highly of the efficient and dignified services of Mr. Brenneman and his staff in a most trying situation.

Very truly yours,
Bay County Medical Society
A. L. ZILIAK, M.D., *President*

Bay City, Michigan.
November 8, 1952

* * *

L. Fernald Foster, M.D., Secretary
Michigan State Medical Society
Lansing 15, Michigan

Dear Doctor Foster,

I am just in receipt of your kind letter of November 7 informing me of my election to Life Membership in our State Society. I am deeply appreciative of this consideration on the part of the house of delegates and trust that you will convey to them my very sincere thanks for conferring this honor upon me.

With very cordial greetings.

Sincerely,
U. J. WILE, M.D.

Ann Arbor, Michigan
November 10, 1952

* * *

F. L. Rector, M.D.
Michigan State Medical Society,
606 Townsend St.,
Lansing 15, Mich.

Dear Dr. Rector,

I thought your book on cancer for high schools was a tremendous job of presenting the information in a way that hit the target exactly the way you wanted it to, and I'm finding out that a lot of others regard it the same way.

The American Cancer Sociey here (via Tuescher) has promised to let us know sometime about how the book is put to use in the schools in the Detroit area, and we'd be interested in the same information about out-state schools.

Of course, it probably will take the schools some time to figure out just what they can do, and to integrate the material into school courses, but it seems inconceivable to me that it should not be done on a wide scale.

Congratulations on a wonderful job!

Sincerely yours,
JACK PICKERING
Detroit Times

Detroit, Michigan
December 6, 1952

* * *

William Bromme, M.D., Council Chairman
Michigan State Medical Society
Lansing, Michigan

Dear Dr. Bromme:

I think it is one of the grandest things that could happen to me, to be presented with the scroll signifying honorary membership in the Michigan State Medical Society.

I want to thank you from the bottom of my heart for the kindness extended me. A copy of THE JOURNAL has reached me and I'm asking Bill Burns to send me a half dozen extra copies. I'm pretty proud (have reasons to be)!

Sincerely,
LEROY A. POTTER

Lansing, Michigan
December 8, 1952

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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

Martin J. Urist, M.D., South Haven, is the author of an article, "Simulated Divergence Paralysis." published in the *Archives of Ophthalmology,* November, 1952.

William H. Havener, M.D., and **William U. McReynolds, M.D.,** of Ann Arbor, are the authors of an article, "False Scotomas Associated with High Uncorrected Refractive Errors," published in the *Archives of Ophthalmology,* November, 1952.

Maurice J. Hauser, M.D., and **Harvey Gass, M.D.,** of Detroit, are the authors of an article, "Optic Nerve Pressure by Aneurysm Relieved by Decompression of Optic Nerve," published in the *Archives of Ophthalmology,* November, 1952.

Prescott Jordan, Jr., M.D., F.A.C.S., and **Harper K. Hellems, M.D.,** of Detroit, are the authors of an article, "Mitral Valva Surgery; a Critical Analysis," published in *Surgery Gynecology and Obstetrics,* December, 1952.

Robert C. Bassett, M.D., F.A.C.S., of Ann Arbor, **Carl F. List, M.D., F.A.C.S,** of Grand Rapids, and **Lloyd J. Lemmen, M.D.,** of Ann Arbor, are the authors of an article, "Surgical Treatment of Intracranial Aneurysm," published in *Surgery Gynecology and Obstetrics,* December, 1952.

William W. Coon, M.D., and **Paul E. Hodgson, M.D.,** of Ann Arbor, are the authors of an article, "Fibrinolysis in Surgery Patients-1, Possible Relationship to a Hemorrhagic Diathesis," published in *Surgery Gynecology and Obstetrics,* December, 1952.

Walter M. Whitehouse, M.D., and **John F. Holt, M.D.,** of Ann Arbor, are the authors of an article, "Paradoxical Expiratory Ballooning of the Hypopharynx in Siblings with Bilateral Choanal Atresia," published in *Digest of Ophthalmology and Otolaryngology,* November, 1952.

Henry S. Brown, M.D., of Detroit, is the author of an article, "Treatment of Low-Voltage Burns," published in *Industrial Medicine and Surgery,* December, 1952.

William G. McEvitt, M.D., of Detroit, is the author of an article, "Cleft Lip and Palate and Parental Age," reprinted from *Plastic and Reconstructive Surgery,* August, 1952.

Martin J. Urist, M.D., of South Haven, is the author of an article, "Simulated Paralysis," published in *Archives of Ophthalmology,* November, 1952.

William S. Reveno, M.D., Herbert Rosenbaum, M.D., and **John H. Buell, M.D.,** all of Detroit, are authors of an original article, "Short-Term Use of Corticotropin as Adjunctive Therapy" which appeared in JAMA of August 2.

Peter E. Tuynman, M.D., and **Lawrence Wm. Gardner, M.D.,** Detroit, are authors of an original article, "Bilateral Aplasia of the Lung" which appeared in *Archives of Pathology,* September, 1952.

Samuel J. Levin, M.D., Detroit, is author of an original article "The Optimum Dose of Pollen in the Treatment of Pollinosis of Children" which appeared in the *Journal of Pediatrics,* September, 1952.

* * *

The Michigan Chapter of the American Association of Medical Record Librarians, at its annual convention, held in the Masonic Temple, Detroit, November 15, 1952, heard the following physicians: A. S. Goldstein, M.D., on "Multiple Sclerosis; Medical Aspects"; M. K. Newman, M.D., on "Rehabilitation Aspects of Multiple Sclerosis and Hemiplegia"; W. A. Hudson, M.D., "Chest Diseases." "Relation of Medical Records Librarian to the Administrator" was the subject presented by Owen R. Pinkerman, Hospital Administrator.

* * *

Careers in Nursing.—Six young women entered nursing schools in 1952 for every five in 1951, according to a survey of this state recently completed by the Michigan Committee on Careers in Nursing.

A gain of 21 per cent for all schools of nursing is reported in the current *Michigan Nurse,* official organ of the Michigan State Nurses Association. From 1,383 freshmen admitted the previous year the number this year rose to a postwar peak of 1,674. The increase of 291 was divided between the four university schools offering a B.S. degree in nursing, which accounted for 187 of this number, and the twenty-two hospital schools offering a three-year course, which gained 104.

Practical nursing too, with its one-year course, showed an upward trend. Schools of practical nursing under the Michigan Department of Public Instruction, Office of Vocational Education, admitted 678 new students from July 1, 1951 to July 1, 1952, an increase of nearly 5 per cent over 646 the previous year.

Although national officials estimate that throughout the U. S. about the same number of freshmen entered nursing this year as last, they consider this a good record in view of "the low rate of potential nursing candidates seventeen to eighteen years old" caused by the low birth rate during the depression years.

Michigan's striking increase, the second in two years, is in line with the general upswing in college admissions. A survey made by Dr. Raymond Walters, president of the University of Cincinnati, found that of 480 colleges reporting, 65 per cent had more freshmen than a year ago. Among the reasons given for the state's increase in student nurses are the following:

(Continued on Page 100)

ANNUAL CLINICAL CONFERENCE

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Recent development of new four-year programs leading to a B.S. degree in nursing, at Michigan State College and the University of Michigan; volunteer work by nurses with the co-operation of citizens, medical and hospital auxiliaries, women's clubs, and other community groups to bring nursing before high school girls; and development of Future Nurses Clubs in 160 or more high schools throughout the state.

Tuberculosis becomes more and more a disease of older people.

Follow-up studies* on a community-wide chest x-ray survey in Washington, D. C., reveal a prevalence of tuberculosis six times greater after fifty-four years of age than between fifteen and fifty-four. For non-whites, the ratio was just over six; for whites, just under six.

Projecting these figures on new cases into the unexamined population and arriving at an estimate of the total cases present, known and unknown, the studies find that four of every five cases among the fifteen to fifty-four age group were known, but *among those over fifty-four years of age only two of every five cases were known.*

—MICHIGAN TUBERCULOSIS ASSOCIATION

*American Review of Tuberculosis, Nov. 1952, P. 548 ff.

The American College of Surgeons Annual Symposium on Trauma and Nutrition will be held May 21, 1953, in Ann Arbor. The papers are competitive for the F. A. Coller, M.D., Award. The competition is open to all residents and interns. For complete information, write Clifford H. Keene, M.D., Chairman of Committee on Arrangements, 2120 Wallingford Road, Ann Arbor.

* * *

The Board of Trustees of the American Medical Association has announced its third contribution of a half million dollars to the American Medical Education Foundation, organized in 1950 to help raise funds within the profession for hard-pressed medical schools. This announcement was made at the AMA Clinical Session in Denver, December 2.

* * *

Hill Burton Grants—Recent projects approved for Hill-Burton grants in Michigan are: Hayes-Green-Beach Hospital at Charlotte, total cost of $660,700 including federal contribution of $322,850—to supply 40 additional beds; Grand Haven Municipal Hospital at Grand Haven, Michigan; total cost $397,990 including federal contribution of $52,290—to supply 17 additional beds; St. Clair Hospital, Detroit—total cost $3,461,000 including federal contribution of $800,000—to supply 225 additional beds.

Status of all Hill Burton hospital construction in Michigan, including the above, as of December 1, 1952:

Completed and in Operation: Twenty-two projects at a total cost of $19,187,485, including federal contribu-

(Continued on Page 102)

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(Continued from Page 100)

tion of $6,935,312 and supplying 1351 additional beds.

Under Construction: Eighteen projects at a total cost of $17,770,501, including federal contribution of $6,996,387 and designed to supply 897 additional beds.

Approved, But Not Yet Under Construction: Five projects at a total cost of $5,807,200, including $1,935,175 federal contribution and designed to supply 386 additional beds.

* * *

C. Robert Dean, M.D., has been appointed director of the Rehabilitation Institute of Metropolitan Detroit, which operates under the Detroit Department of Health with a $250,000 grant from the United Foundation. The Institute is located at Herman Kiefer Hospital, 8811 Hamilton Avenue, Detroit 2. The Technical Advisory Committee is composed of Joseph G. Molner, M.D., Clarence Eismon, M.D., Angus Goetz, M.D., F. A. Weiser, M.D., and Gordon Scott, Ph.D., all of Detroit.

Dr. Dean, a son of Carleton Dean, M.D., Lansing, Director of the Michigan Crippled Children Commission, also has been appointed as instructor in physical medicine at Wayne University College of Medicine.

Dr. Dean, a graduate of Wayne University College of Medicine, recently completed a four-year residency in Minneapolis in physical medicine and rehabilitation.

* * *

The Pan-Pacific Surgical Association will hold its Sixth Pan-Pacific Surgical Conference in Honolulu in November, 1954, according to an announcement by I. S. Ravden, M.D., of Philadelphia, president of the Association. For complete information, write the Association at Suite 7, Young Bldg., Honolulu, Hawaii.

* * *

The First World Congress on Fertility and Sterility will be held at the Henry Hudson Hotel, New York City on May 25-31, 1953. For information, write A. I. Weisman, M.D., 1160 Fifth Avenue, New York.

* * *

Hugh W. Brenneman, MSMS Public Relations Counsel, was a member of a panel on "Building Co-operative Physician-Hospital P.R. Programs" at the 1952 AMA Public Relations Conference, held in Denver on the occasion of the AMA Clinical Session, December 1-5, 1952.

* * *

Robert Ramspeck, former Congressman and now chairman of the U. S. Civil Service Commission, reported at the AMA Public Relations Conference in Denver that the Federal Government had "only" 6,609 information (publicity) specialists on the payroll, not counting typists, clerks, stenographers, secretaries and other auxiliary personnel!

* * *

Rheumatic Fever Postgraduate Fellowships for 1953.—The Rheumatic Fever Control Committee of the Michigan State Medical Society again has written all Rheumatic Fever Center Chairmen re the six annual Postgraduate Fellowships for the study of rheumatic fever

(Continued on Page 104)

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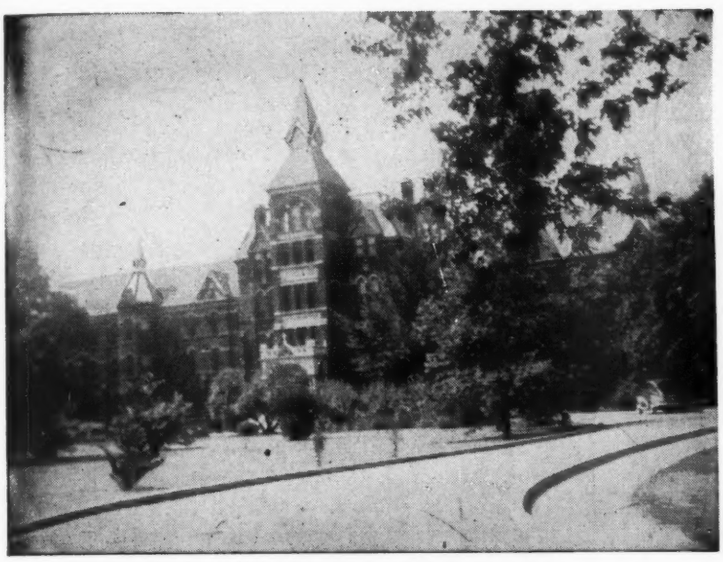

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 2
Surgical Anatomy and Clinical Surgery, two weeks, starting March 16
Basic Principles in General Surgery, two weeks, starting March 30
Gallbladder Surgery, ten hours, starting April 20
Surgery of Colon and Rectum, one week, starting March 2
General Surgery, one week, starting February 9
General Surgery, two weeks, starting April 20
Fractures and Traumatic Surgery, two weeks, starting March 2
GYNECOLOGY—Intensive Course, two weeks, starting February 16
Vaginal Approach to Pelvic Surgery, one week, starting March 2
OBSTETRICS—Intensive Course, two weeks starting March 2
PEDIATRICS—Intensive Course, two weeks, starting April 6
MEDICINE—Intensive General Course, two weeks, starting May 4
Electrocardiography and Heart Disease, two weeks, starting March 16
Allergy, one month and six months, by appointment
UROLOGY—Intensive Course, two weeks, starting April 13
Ten-Day Practical Course in Cystoscopy starting every two weeks
DERMATOLOGY—Intensive Course, two weeks, starting May 11

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(Continued from Page 102)

to be awarded in 1953. The Committee has approved the comprehensive course in rheumatic fever to be given at St. Francis Sanatorium for cardiac children, Roslyn, Long Island, N. Y., June 1-12, 1953.

Candidates shall have worked in one of the Rheumatic Fever Diagnostic and Consultation Centers of Michigan for a minimum period of one year; they shall signify their intention to continue their work in these Centers upon completion of the P.G. course; and their application is to be approved by the Chairman of the local Rheumatic Fever Committee or by the President of the County Medical Society.

One candidate for each Rheumatic Fever Center (with two candidates in Wayne County) will be granted. Applications are to be submitted no later than February 1, 1953.

* * *

The American Cancer Society National Campaign goal for 1953 has been set at $18,000,000.

* * *

Parke, Davis & Company of Detroit presented gold watches to some 320 employes with twenty-five years or more service, who were honored at a dinner in the Veterans Memorial Building, Detroit, on December 15. Three of the group have worked for Parke, Davis more than fifty years, the longest service record being that of John J. Hannan who joined the Company, October 25, 1900, and is still actively employed.

* * *

R. H. Pino, M.D., Detroit, spoke on "Medical Associates" and the work of the Michigan State Medical Society in pioneering this activity, at the annual "Career Night" of Southeastern High School in Detroit, on November 13.

* * *

"ILO Spells Danger!" is the title of an informative booklet just off the American Medical Association presses. The pamphlet outlines the attempt to over-rule the United States Congress and the people of this country by ratification of the International Labor Organization's convention on minimum standards of social security by a two-thirds majority of ONLY THE SENATE, would result in socialized medicine, despite the repudiation of compulsory health insurance by the American people as expressed in part on November 4.

* * *

The World Medical Association will hold its first western hemisphere conference, in conjunction with Pan American Medical Confederation on April 24, 1953, in Richmond, Virginia. One of the features of this western hemisphere conference of the W.M.A. is an invitation to the Governor of every State to send one representative, a doctor of medicine seventy-five years of age, to attend the meeting as an honor guest, to note the significant advancements and improvements that have been made in medical progress in the last fifty years.

* * *

Lester D. Bibler, M.D., Indianapolis, is the author of an interesting article, "Introducing New Members to the County Medical Society," which was published in

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Current Medical Digest for November, 1952. This story amply portrays an excellent and painless way of indoctrinating young medical practitioners into the activities and opportunities of their county and state medical societies.

* * *

The eighth annual Conference on Rural Health will be held at Hotel Roanoke, Roanoke, Virginia, February 27-28, 1953. The two themes of the session will be: "The Place of Public Health Service in County Health Councils" and "The Place of the Physician in Rural Health Activities."

On Thursday, February 26, doctors of medicine will make up state rural health committees which will meet for an afternoon discussion on "Doctor Participation in Community Programs."

* * *

Michael Reese Hospital, Chicago, announces a course in Electrocardiographic Interpretation for graduate physicians by Louis N. Katz, M.D., and associates, beginning February 11 and meeting each Wednesday from 7:00 to 9:00 p.m., for twelve weeks. For more information, write the Administrative Secretary, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago 16, Illinois.

* * *

Michigan Medical Service (Blue Shield) showed a gain of 43,899 new members during September, 1952, bringing the total gain so far this year to 196,189 new members. The total Blue Shield membership in September was 2,575,545.

The total membership of Michigan Hospital Service (Blue Cross) as of September, 1952, was 2,723,663. In Blue Cross participating hospitals, 33 per cent of the patient days were paid for by Blue Cross, 18.8 per cent by insurance companies, 7.8 per cent by governmental agencies, with the remaining 40.3 per cent being paid by the patients themselves.

* * *

Frank W. Hartman, M.D., Detroit, has been elected to succeed Harvey M. Merker, D.Sc., as president of the Detroit Institute of Cancer Research. Other newly elected officers are: Donald C. Beaver, M.D., Detroit, vice president; Dean Gordon H. Scott, Detroit, secretary; and Murray L. MacDonald, Detroit, treasurer.

The Institute is supported financially by the United Foundation, the American Cancer Society, and various private foundations. Its general research program will be extended into the fields of clinical investigation and patient care as soon as the new cancer research floor at Receiving Hospital is completed. This new floor will house twenty-four patients and provide some 10,000 square feet of laboratory, library, and animal room space.

* * *

The Shiawassee County Medical Society celebrated the Fiftieth Anniversary of its charter with a dinner party for members and their ladies at the Owosso City Club, Thursday, December 18. Edgar A. Guest, of Detroit, was the honored speaker. Honors were paid to the two living charter members: A. M. Hume, M.D.,

oldest living past president of the Michigan State Medical Society, and W. T. Parker, M.D.

Present, representing MSMS, were President R. J. Hubbell, M.D., Kalamazoo, and Otto O. Beck, M.D., Birmingham, Immediate Past-President.

* * *

The Michigan Foundation for Medical and Health Education, Inc., an activity sponsored by the Michigan State Medical Society, recently received the sum of $1,939.74 from the estate of the late Frances Alma Miller, formerly of Leslie. Mrs. Miller included a clause in her will naming the Foundation as residuary legatee.

* * *

H. T. Sethney, M.D., of Menominee, was recently feted at a testimonial dinner sponsored by the Menominee and Marinette County Medical Societies. Dr. Sethney was honored for his work as head of the staff at St. Joseph's Hospital, president of the Menominee County Medical Society, Menominee City Health Officer, and member of the Menominee Board of Education. He was presented with a plaque expressing the admiration of his colleagues "for his long service to Medicine and to humanity on the Menominee River." This two-state outpouring of M.D.'s was held in Marinette, Wisconsin.

* * *

The Clinton-Gratiot County Bar Association sponsored a dinner meeting on December 10 in St. Johns "to bring together two professional groups, the doctors and lawyers of the area." The meeting of M.D.'s and barristers featured LeMoyne Snyder, M.D., Lansing, who spoke on "Medical Evidence"; Charles E. Black, M.D., and Leo V. Walker, M.D., Lansing, who led a question-and-answer period on Pathology.

A high percentage of the membership of the Clinton County Medical Society and the Gratiot-Isabella-Clare County Medical Society attended this meeting as guests of the lawyers.

* * *

Town Needs Doctor to Fill Vacancy in March.—The village of Ashley, Michigan, with its 446 inhabitants and surrounding fertile farming land of 300 square miles, urgently needs a doctor to fill the vacancy in March when its only M.D. is to be inducted into the Armed Forces. A large and very active general practice in southern Gratiot County with large adjoining areas in other counties of Clinton, Saginaw and Montcalm, is available. Adequate hospital facilities are in Alma, 22 miles north, and in St. Johns, 18 miles south. If interested, immediately contact the village mayor, or V. L. Sheline, M.D., or Ashley, Michigan.

WHAT THEY ARE SAYING ABOUT THE NEW MSMS HIGH SCHOOL CANCER MANUAL

Donald E. Johnson, Director, American Cancer Society, Flint, Michigan—"I feel that at least we have taken a tremendously important step in cancer education."

W. W. Bauer, M.D., Director, Bureau of Health Education, American Medical Association, Chicago, Illinois—"It looks like a very useful and interesting job and should help to clear up many misconceptions. As a matter of fact, I found it very useful in helping to straighten out my thinking."

W. E. Batchelder, M.D., American College of Surgeons, Chicago, Illinois—"I believe that you have made a tremendous and most worthwhile contribution to the field of cancer education."

Norman F. Miller, M.D., Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan—"I believe this pamphlet is one of the truly real contributions to cancer education."

A. E. Heustis, M.D., State Health Commisssioner, Lansing—"I think you have done a splendid job and the Michigan Department of Health is proud, indeed, to have been associated with its development and final production."

Mrs. Grant Hess, State Commander, American Cancer Society, Boise, Idaho—"This is an excellent manual, topping any other I have seen."

W. Kenneth Clark, M.D., Director, Division of Cancer Control, State Health Department, Pennsylvania —"It is a beautifully gotten-up booklet, and the content matter is not only easily understood but is presented in very logical sequence."

Harold W. Dargeon, M.D., Chairman, Tumor Registry Committee, American Academy of Pediatrics, New York—"Permit me to congratulate you on the production of this very valuable teaching booklet, and I am sure it would help the cancer education program tremendously if it could be distributed throughout the country as well as in Michigan."

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JOHN L. PFIRMAN, Director of Public Education, Pennsylvania Division, American Cancer Society, Harrisburg, Pennsylvania—"Your 'Story of Cancer Control for High Schools' is an excellent publication. I don't mind stating, that, in my own mind, it is far superior to the one we are now using, 'Youth Looks At Cancer.' "

HEALTH SERVICES—UNITED FUND MEMBER AGENCIES

Michigan Heart Association—finances research, education, and community service projects.

Arthritis and Rheumatism Foundation—is interested primarily in clinical research.

Sister Elizabeth Kenny Foundation—operates the Kenny Polio Center in Pontiac.

United Cerebral Palsy Association—assists in the development and maintenance of local CP centers.

National Association for Mental Health—promotes national attack on the mental health problem.

Michigan Society for Mental Health—conducts a statewide program of education, demonstration of needs, and coöperative planning in the mental health field.

Multiple Sclerosis Society—finances diagnostic and therapeutic centers in Detroit and Battle Creek.

Leader Dogs for the Blind—operates guide dog training school in Rochester.

Michigan Association for Better Hearing—promotes lipreading classes, and has recently put in operation a mobile hearing testing unit.

American Hearing Society—conducts a national program of research and education in the field of hearing.

Michigan Epilepsy Center—works with difficult epilepsy cases, seeking to help physicians learn more about their effective rehabilitation.

National Epilepsy League—conducts nationwide attack on problems of epileptics.

Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine—conducts scientific research and supplies controlled strains of animals to 175 research laboratories.

National League for Nursing—seeks to improve organized nursing services.

Essential State and National Services

United Defense Fund—supports U.S.O. and social hygiene services as well as important communitv defense services.

Big Brothers of America—promotes nationally a program of individual guidance for pre-delinquent boys.

Child Welfare League of America—protects the interests of children everywhere.

National Child Labor Committee—works to eliminate harmful employment among children.

Michigan Welfare League—works to promote adequate, effective health and welfare services throughout the state.

National Social Welfare Assembly—co-ordinates the work of social agencies nationally.

Family Service Association of America—helps local family agencies improve their services.

International Social Service—handles social problems that cross national borders.

American Federation of International Institutes—works with displaced persons and refugees.

National Urban League—works to increase co-operative relationship with whites and negroes.

National Federation of Settlements—promotes neighborhood centers for improving human relationships.

National Legal Aid—provides legal aid to those who cannot afford the services of an attorney.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

PHYSIOLOGICAL CHANGES IN PLASMA PROTEINS CHARACTERISTIC OF HUMAN REPRODUCTION. Cross-Sectional and Longitudinal Electrophoretic Data for Women During and Following Uncomplicated and Complicated Pregnancies. By Icie G. Macy, Ph.D., Sc.D., Director of the Research Laboratory, Children's Fund of Michigan, Detroit, and Harold C. Mack, M.D., Department of Obstetrics and Gynecology, Harper Hospital, Detroit, with the technical assistance of Eliot F. Beach, Ph.D.; Margaret N. Coryell, Ph.D.; Elsie Z. Moyer, M.S.; Abner R. Robinson, M.S.; Ernest J. Schoeb, B.S., and Margaret E. Wiseman, B.S. New York: The Nutrition Foundation, Inc. Free.

This is a small paper-bound report of the results of a study on some hundred-odd individuals during and following pregnancy, from the standpoint of plasma protein fractions, which were obtained by electrophoretic studies. Some of the cases have suffered complications of pregnancy, but there is intentionally no commentary or discussion of the accumulated data. While the book represents a vast amount of work, it probably is of value only to further workers in this particular field of research.

A.A.H.

ESSENTIALS OF BODY MECHANICS IN HEALTH AND DISEASE. By Joel E. Goldthwait, M.D., F.A.C.S., LL.D., Sc.D.; Lloyd T. Brown, M.D., F.A.C.S.; Loring T. Swaim, M.D., and John G. Kuhns, M.D., F.A.C.S., Sc.D. 135 illustrations. Fifth edition. Philadelphia: J. B. Lippincott Co., 1952. Price $6.00.

A most helpful book. This vital subject is presented in a clearly and concisely written style and is well illustrated. Included is the practical application pertaining to all phases of physical activity.

A word of gratitude is due the authors for bringing this most needed subject—the correct mechanics of the body—before the medical profession and all interested in the optimum of health and physical fitness.

M.M.

OPERATIVE NEUROSURGERY With Emphasis on Procedures in Trauma. By Elisha Stephens Gurdjian, M.D. Professor of Neurosurgery, Wayne University College of Medicine; Chief, University Neurosurgical Service, Grace Hospital, Detroit, Mich., and John E. Webster, M.D., Assistant Professor of Surgery, Wayne University College of Medicine; University Neuro-Surgical Service, Grace Hospital, Detroit, Mich. Baltimore: The Williams & Wilkins Co., 1952. Price $10.00.

The authors put a great amount of energy in the compilation of this text. The subject matter is satisfactorily covered. For each division of the nervous system there is an historical chapter, followed by a rather exhaustive review of the anatomical, physiological and pathological considerations. Diagnostic aids, neurosurgical techniques, anaesthesias and surgical facilities are adequately presented. The contents have been divided into four parts: head, spine, autonomic nervous system and peripheral

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nervous system, which illustrates a complete coverage of the nervous system. To add to the textual matter, there are extensive bibliographies as an appendix to each of these divisions. Furthermore, there is a total of 129 full page plates of black and white drawings with a variable number, ranging up to nine or ten drawings on each plate, illustrating the anatomy and surgical techniques encountered or required in the performance of a neurosurgical operation.

The authors in the preface state "that an effort has been made to give pertinent anatomic, diagnostic and technical information in the execution of certain operative procedures in neurological surgery." All this they have admirably accomplished.

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HEREDITARY CAPILLARY FRAGILITY

(Continued from Page 64)

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(Continued from Page 88)

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Thompson, Henry E.....2212 Clinton, Detroit 7
Tolbert, Vassal G.....3705 Hastings, Detroit 1
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Student Health Service, Wayne University, Detroit 1
Trombley, Joseph J.....19000 Puritan, Detroit 23
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Williams, Delford G., Jr.....8540 Twelfth St., Detroit 6
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749 David Whitney Bldg., Detroit 26
Woolfenden, Joseph B.....16321 Mack Ave., Detroit 24
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Zelaski, Stanley L...Detroit Receiving Hospital, Detroit 26

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Practice or will consider association by doctor with three years surgical residency and six months pathology. Board eligible. Considerable practice and major operating experience. Will do surgery and if necessary some general practice. American born and American graduate. Protestant. Michigan License. Have good references. Contact: Box 1, 606 Townsend Street, Lansing 15, Michigan.

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FRANK N. WILSON—IN MEMORIAM

(Continued from Page 77)

ber, 1948, but because of his love for an active life out-of-doors, he found a rest program unusually difficult. Nevertheless he continued to study the electrocardiogram and was always willing to help in the research activities of the Heart Station.

Many honors came to Doctor Wilson during his life. He was elected to honorary memberships in many important medical societies in America and in foreign countries, and in 1950 issues of both *The American Heart Journal* and *Circulation* were dedicated to him. Finally, in 1951, he was given the Gold Heart Medal by the American Heart Association. Although never very demonstrative, Doctor Wilson greatly appreciated these tokens of esteem. They helped greatly to carry him through periods of discouragement that came during his long final illness.